

United States  
Environmental Protection  
Agency

Prevention, Pesticides, and  
Toxic Substances  
(H7506C)

EPA 735-B-93-001  
July 1993

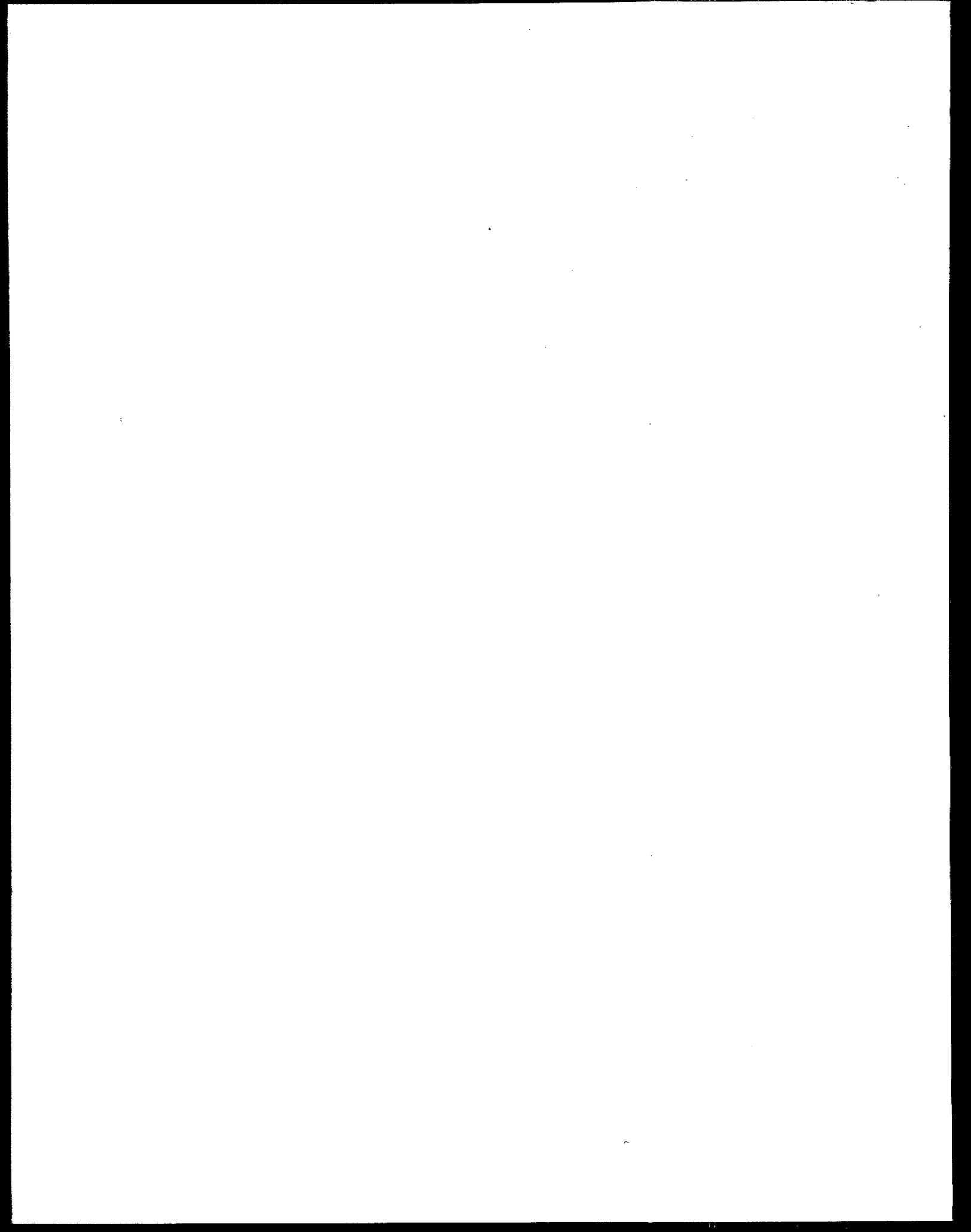


# **The Worker Protection Standard for Agricultural Pesticides— How To Comply**

## **What Employers Need To Know**









## **The Importance of This Manual**

Regulatory agencies will enforce the requirements of the 1992 Federal Worker Protection Standard (Code of Federal Regulations, Title 40, Part 170) when you use a pesticide product with labeling that refers to the Worker Protection Standard. If you do not comply with the Worker Protection Standard requirements, you will be in violation of Federal law, since it is illegal to use a pesticide product in a manner inconsistent with its labeling. This manual, in its official Federal format, provides the information necessary to comply with the requirements of the 1992 Federal Worker Protection Standard. EPA may issue additional guidance about the Worker Protection Standard and the Worker Protection Standard may be amended in the future. Check with your State or Tribal agency responsible for pesticides for further information and updates.

## **The Official Federal Format**

The official Federal format contains introductory pages i through viii, Units 1 through 6 (pages 1-98), Appendices A through C (pages 99-132), and an Index (pages 133-141).

## **Additional Worker Protection Requirements in Your Area**

Some States, Tribes or local governments with jurisdiction over pesticide enforcement have additional worker protection requirements beyond the requirements described in the Federal manual. Check with these agencies to obtain the information you need to comply with all applicable State, Tribal or local requirements.

## **Reproduction of the Manual**

This manual may be reproduced, but the official Federal format must not be altered. If this manual is altered in any way, it may no longer provide the information necessary for employers to comply with the requirements of the 1992 Federal Worker Protection Standard.

## **Material Appended to the Manual**

States, Tribes or local governments with jurisdiction over pesticide enforcement may elect to append additional worker protection requirements to the Federal manual. These additions may only be appended at the end of the Federal manual, after the Index. Any additional material should be clearly identified as State, Tribal or local requirements.

## **Additional Compliance Information**

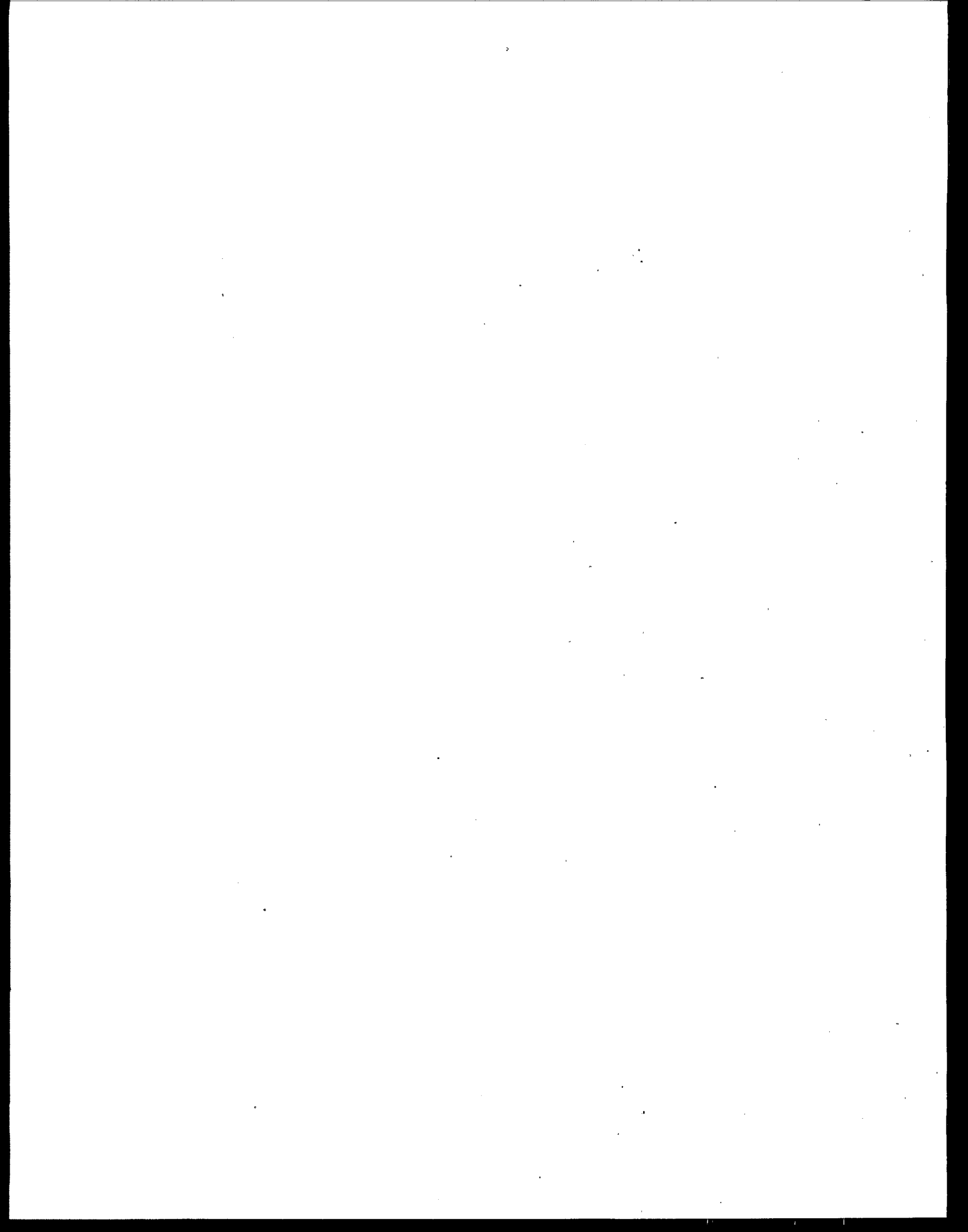
Provisions of the 1992 Federal Worker Protection Standard will be phased into effect to allow time for employers to learn about the changes and make plans to comply. See the March 1993 EPA bulletin "The Worker Protection Standard for Agricultural Pesticides—How Soon Do You Need To Comply?" It is available from your EPA regional office, your State pesticide agency or your Tribal agency. This bulletin has information applicable through April 15, 1994.

In general, prior to April 15, 1994, you must comply with label-specific worker protection requirements as soon as you use a pesticide that refers to the Worker Protection Standard in the Agricultural Use Requirements box on the label. In addition, after April 15, 1994, you must comply with all requirements of the Worker Protection Standard.



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## Who Needs To Read This Manual?

You probably need to comply with the Worker Protection Standard (WPS) if you are a

- ◆ **Manager or owner** of a farm, forest, nursery, or greenhouse,  
OR
- ◆ **Labor contractor** for a farm, forest, nursery, or greenhouse,  
OR
- ◆ **Custom (for-hire) pesticide applicator or independent crop consultant** hired by a farm,  
forest, nursery, or greenhouse operator.

Most WPS provisions are protections that you as an **employer** must provide to **your own employees** and, in some instances, to **yourself**. The WPS covers two types of employers, which are defined according to the type of work performed by their employees:

### Worker Employers

If you hire or contract for people to do agricultural worker tasks, or if you do them yourself, the WPS considers you a worker employer. In general, agricultural workers are persons who (1) do hand labor tasks, such as weeding, planting, cultivating, and harvesting, or (2) do other tasks involved in the production of agricultural plants, such as moving or operating irrigation equipment (see p. 14 for complete definition). Units 3 and 4 of this manual describe the WPS protections you must provide to the agricultural workers you employ.

### Handler Employers

If you hire people to do pesticide handling tasks, or if you do them yourself, the WPS considers you a handler employer. In general, pesticide handlers are persons who mix, load, apply, or do other tasks that bring them into direct contact with pesticides (see p. 14–15 for complete definition). You must provide WPS protections to all your pesticide handler employees, whether or not they are certified as applicators of restricted-use pesticides. Units 3 and 5 of this manual describe the WPS protections you must provide to the pesticide handlers you employ.

- ◆ The same employee may be a worker at some times and a handler at other times, depending on the type of task being performed.
- ◆ You may be both a handler employer and a worker employer, depending on the tasks that you and your employees do.
- ◆ Both general-use pesticides and restricted-use pesticides are covered by the WPS.

## About This Manual

This “How To Comply” manual will

- ◆ Help you determine whether you are covered by the WPS,
- ◆ Give you detailed information on how to comply with the WPS requirements, including exceptions, restrictions, exemptions, options, and examples, and
- ◆ Provide you with a “Quick Reference Guide”—a simplified route to compliance that focuses on **maximum** requirements.

Important definitions and other special explanations are enclosed in shaded boxes. Reading them will help you better understand the WPS requirements and how they apply to you.



**For more information** about the Worker Protection Standard, or if you have questions or concerns about pesticides, contact the agency responsible for regulating pesticides in your area or the EPA Regional Office nearest you.

**Region 1** (MA, CT, RI, NH, VT, ME)

U.S. Environmental Protection Agency, Region 1  
Pesticides and Toxic Substances Branch (APT)  
1 Congress St.  
Boston, MA 02203  
(617) 565-3273

**Region 2** (NY, NJ, PR, VI)

U.S. Environmental Protection Agency, Region 2  
Pesticides and Toxic Substances Branch (MS-105)  
2890 Woodgridge Ave., Building #10  
Edison, NJ 08837-3679  
(908) 321-6765

**Region 3** (PA, MD, VA, WV, DE)

U.S. Environmental Protection Agency, Region 3  
Toxics and Pesticides Branch (3AT-30)  
841 Chestnut Building  
Philadelphia, PA 19107  
(215) 597-8598

**Region 4** (GA, NC, SC, AL, MS, KY, FL, TN)

U.S. Environmental Protection Agency, Region 4  
Pesticides & Toxic Substances Branch (4APT-MD)  
345 Courtland St., N.E.  
Atlanta, GA 30365  
(404) 347-5201

**Region 5** (IL, MI, MN, IN, OH, WI)

U.S. Environmental Protection Agency, Region 5  
Pesticides and Toxic Substances Branch (5SPT)  
77 W. Jackson Blvd.  
Chicago, IL 60604  
(312) 886-6006

**Region 6** (TX, OK, AR, LA, NM)

U.S. Environmental Protection Agency, Region 6  
Pesticides and Toxics Branch (6T-P)  
1445 Ross Ave.  
Dallas, TX 75202-2733  
(214) 655-7235

**Region 7** (MO, KS, IA, NB)

U.S. Environmental Protection Agency, Region 7  
Toxics and Pesticides Branch (TOPE)  
726 Minnesota Ave.  
Kansas City, KS 66101  
(913) 551-7020

**Region 8** (CO, MT, ND, SD, UT, WY)

U.S. Environmental Protection Agency, Region 8  
Toxic Substances Branch (8ART-TS)  
One Denver Place, Suite 500  
999 18th St.  
Denver, CO 80202-2405  
(303) 293-1730

**Region 9** (CA, NV, AZ, HI, GU)

U.S. Environmental Protection Agency, Region 9  
Pesticides and Toxics Branch (A-4)  
75 Hawthorne St.  
San Francisco, CA 94105  
(415) 744-1090

**Region 10** (WA, OR, ID, AK)

U.S. Environmental Protection Agency, Region 10  
Pesticides and Toxic Substances Branch (AT-083)  
1200 Sixth Ave.  
Seattle, WA 98191  
(206) 553-1918



July 1993

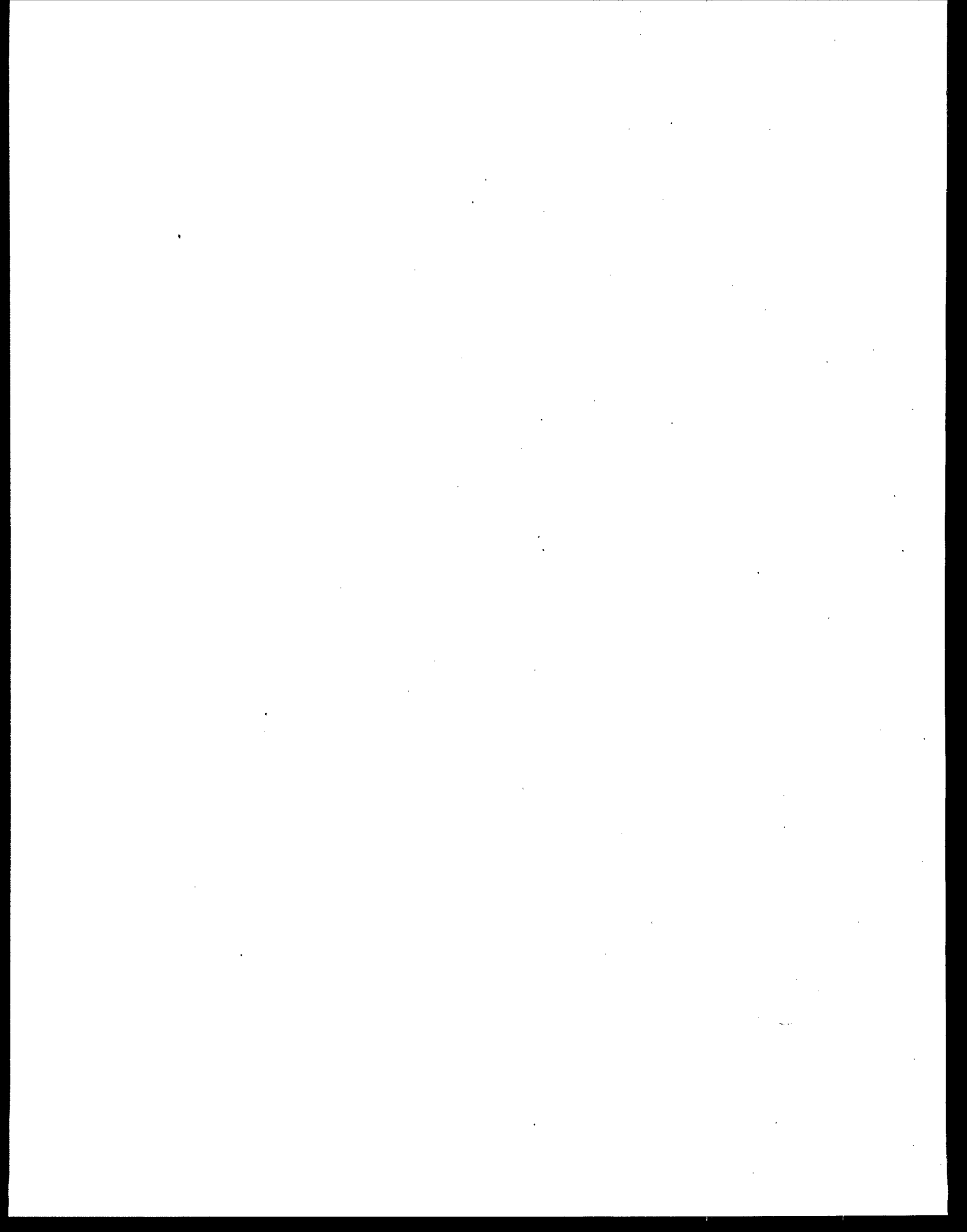
# **The Worker Protection Standard for Agricultural Pesticides— How To Comply**

## **What Employers Need To Know**

- ◆ **Farms**
- ◆ **Forests**
- ◆ **Nurseries**
- ◆ **Greenhouses**









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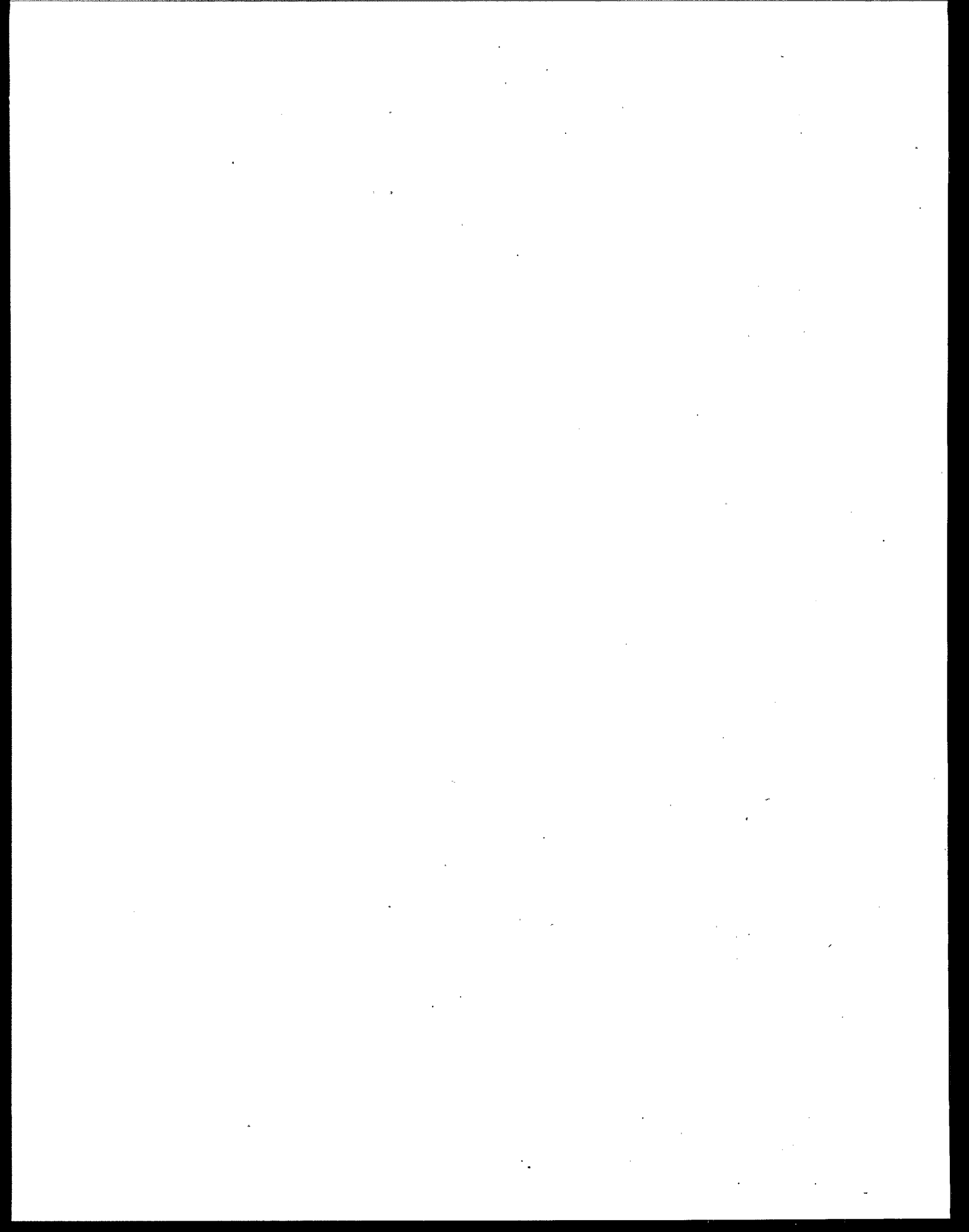


# **The Worker Protection Standard for Agricultural Pesticides— How To Comply**

**What Employers  
Need To Know**









## UNIT 1

# Quick Reference Guide

1

This 2-page Quick Reference Guide to the Worker Protection Standard lists the maximum WPS requirements. Fulfilling these maximum requirements is a relatively simple way to comply, but it may cause you to do more than is required in some situations. If you want to look at exceptions or want more information or examples for certain provisions, refer to the page numbers listed in the Quick Reference Guide.

The Guide in this unit is presented on 2 pages to allow you to view all the requirements together. For a large-print version of this same text, see Appendix C.

July 1993





# QUICK REFERENCE GUIDE TO THE 1992 WORKER PROTECTION STANDARD (WPS)

The WPS is a Federal regulation designed to protect agricultural workers (people involved in the production of agricultural plants) and pesticide handlers (people mixing, loading, or applying pesticides or doing other tasks involving direct contact with pesticides) (see pp. 14-15). The guide on these two pages presents the maximum WPS requirements. It does not include exceptions that may permit you to do less or options that may involve different requirements. **You will be in compliance with the Federal WPS if you make sure that the requirements listed on these two pages are met.** Each section below lists pages in this manual where you can find out about exceptions and options. For more information about your responsibilities, read pp. 12-20. There are some exemptions for owners of agricultural establishments and members of their immediate family (see pp. 91-93).

## Duties for All Employers

### Anti-Retaliation (p. 19)

Do not retaliate against a worker or handler who attempts to comply with the WPS.

### Information at a Central Location (pp. 23-24)

1. In an easily seen central location on each agricultural establishment, display close together:
  - ◆ EPA WPS safety poster,
  - ◆ name, address, and telephone number of the nearest emergency medical facility,
  - ◆ these facts about each pesticide application [from before each application begins until 30 days after the restricted-entry interval (REI)]:
    - ◆ product name, EPA registration number, and active ingredient(s),
    - ◆ location and description of treated area,
    - ◆ time and date of application, and REI.
2. Tell workers and handlers where the information is posted, and allow them access.
3. Tell them if emergency facility information changes and update the posted information.
4. Keep the posted information legible.

### Pesticide Safety Training (pp. 25-28)

Unless they possess a valid EPA-approved training card, train handlers and workers before they begin work and at least once each 5 years:

- ◆ use written and/or audiovisual materials,
- ◆ use EPA WPS handler training materials for training handlers,
- ◆ use EPA WPS worker training materials for training workers,
- ◆ have a certified applicator conduct the training orally and/or audiovisually in a manner the employees can understand, using easily understood terms, and respond to questions.

### Decontamination Sites (pp. 29-31)

1. Establish a decontamination site within 1/4 mile of all workers and handlers. Supply:
  - ◆ enough water for routine and emergency whole-body washing and for eyeflushing,
  - ◆ plenty of soap and single-use towels,
  - ◆ a clean coverall.
2. Provide water that is safe and cool enough for washing, for eyeflushing, and for drinking. Do not use tank-stored water that is also used for mixing pesticides.

3. Provide handlers the same supplies where personal protective equipment (PPE) is removed at the end of a task.
4. Provide the same supplies at each mixing and loading site.
5. Make at least 1 pint eyeflush water immediately accessible to each handler.
6. Do not put worker decontamination sites in areas being treated or under an REI.
7. In areas being treated, put decontamination supplies for handlers in enclosed containers.

### Employer Information Exchange (pp. 33-34)

1. Before any application, commercial handler employers must make sure the operator of the agricultural establishment where a pesticide will be applied is aware of:
  - ◆ location and description of area to be treated,
  - ◆ time and date of application,
  - ◆ product name, EPA registration number, active ingredient(s), and REI,
  - ◆ whether the product label requires both oral warnings and treated area posting,
  - ◆ all other safety requirements on labeling for workers or other people.
2. Operators of agricultural establishments must make sure any commercial pesticide establishment operator they hire is aware of:
  - ◆ specific location and description of all areas on the agricultural establishment where pesticides will be applied or where an REI will be in effect while the commercial handler is on the establishment,
  - ◆ restrictions on entering those areas.

### Emergency Assistance (pp. 35-36)

When any handler or worker may have been poisoned or injured by pesticides:

1. Promptly make transportation available to an appropriate medical facility.
2. Promptly provide to the victim and to medical personnel:
  - ◆ product name, EPA registration number, and active ingredient(s),
  - ◆ all first aid and medical information from label,
  - ◆ description of how the pesticide was used,
  - ◆ information about victim's exposure.



## Additional Duties for Worker Employers

### Restrictions During Applications (p. 45)

1. In areas being treated with pesticides, allow entry only to appropriately trained and equipped handlers.
  2. Keep nursery workers at least 100 feet away from nursery areas being treated.
  3. Allow only handlers to be in a greenhouse:
    - ◆ during a pesticide application,
    - ◆ until labeling-listed air concentration level is met or, if no such level, until after 2 hours of ventilation with fans.
- (Also see nursery restrictions and greenhouse restrictions) (pp. 51–52, 53–55)

### Restricted-Entry Intervals (REI's) (pp. 45–46)

During any REI, do not allow workers to enter a treated area and contact anything treated with the pesticide to which the REI applies.

(Also see early entry by workers) (pp. 46–47, 59–70)

### Notice About Applications (pp. 41–44)

1. Orally warn workers and post treated areas if the pesticide labeling requires.
2. Otherwise, either orally warn workers or post entrances to treated areas. Tell workers which method is in effect.
3. Post all greenhouse applications.

### Posted Warning Signs:

1. Post legible 14" X 16" WPS-design signs just before application; keep posted during REI; remove before workers enter and within 3 days after the end of the REI.
2. Post signs so they can be seen at all entrances to treated areas, including entrances from labor camps.

### Oral Warnings:

1. Before each application, tell workers who are on the establishment (in a manner they can understand):
  - ◆ location and description of treated area,
  - ◆ REI, and not to enter during REI.
2. Workers who enter the establishment after application starts must receive the same warning at the start of their work period.

## Additional Duties for Handler Employers

### Application Restrictions and Monitoring (pp. 73–74)

1. Do not allow handlers to apply a pesticide so that it contacts, directly or through drift, anyone other than trained and PPE-equipped handlers.
2. Make sight or voice contact at least every 2 hours with anyone handling pesticides labeled with a skull and crossbones.
3. Make sure a trained handler equipped with labeling-specified PPE maintains constant voice or visual contact with any handler in a greenhouse who is doing fumigant-related tasks, such as application or air-level monitoring.

### Specific Instructions for Handlers (pp. 75–76)

1. Before handlers do any handling task, inform them, in a manner they can understand, of all pesticide labeling instructions for safe use.
2. Keep pesticide labeling accessible to each handler during entire handling task.
3. Before handlers use any assigned handling equipment, tell them how to use it safely.
4. When commercial handlers will be on an agricultural establishment, inform them beforehand of:
  - ◆ areas on the establishment where pesticides will be applied or where an REI will be in effect,
  - ◆ restrictions on entering those areas.

(The agricultural establishment operator must give you these facts.)

### Equipment Safety (p. 77)

1. Inspect pesticide handling equipment before each use, and repair or replace as needed.
2. Allow only appropriately trained and equipped handlers to repair, clean, or adjust pesticide equipment that contains pesticides or residues.

### Personal Protective Equipment (PPE) (pp. 79–83)

(See exceptions to PPE) (pp. 85–87)

### Duties Related to PPE:

1. Provide handlers with the PPE the pesticide labeling requires for the task, and be sure it is:
  - ◆ clean and in operating condition,
  - ◆ worn and used correctly,
  - ◆ inspected before each day of use,
  - ◆ repaired or replaced as needed.
2. Be sure respirators fit correctly.
3. Take steps to avoid heat illness.

4. Provide handlers a pesticide-free area for:
  - ◆ storing personal clothing not in use,
  - ◆ putting on PPE at start of task,
  - ◆ taking off PPE at end of task.
5. Do not allow used PPE to be worn home or taken home.

### Care of PPE:

1. Store and wash used PPE separately from other clothing and laundry.
2. If PPE will be reused, clean it before each day of reuse, according to the instructions from the PPE manufacturer unless the pesticide labeling specifies other requirements. If there are no other instructions, wash in detergent and hot water.
3. Dry the clean PPE before storing, or hang to dry.
4. Store clean PPE away from other clothing and away from pesticide areas.

### Replacing Respirator Purifying Elements:

1. Replace dust/mist filters:
  - ◆ when breathing becomes difficult,
  - ◆ when filter is damaged or torn,
  - ◆ when respirator label or pesticide label requires (whichever is shorter), OR
  - ◆ at the end of day's work period, in the absence of any other instructions or indications.
2. Replace vapor-removing cartridges/canisters:
  - ◆ when odor/taste/irritation is noticed,
  - ◆ when respirator label or pesticide label requires (whichever is shorter), OR
  - ◆ at the end of day's work period, in the absence of any other instructions or indications.

### Disposal of PPE:

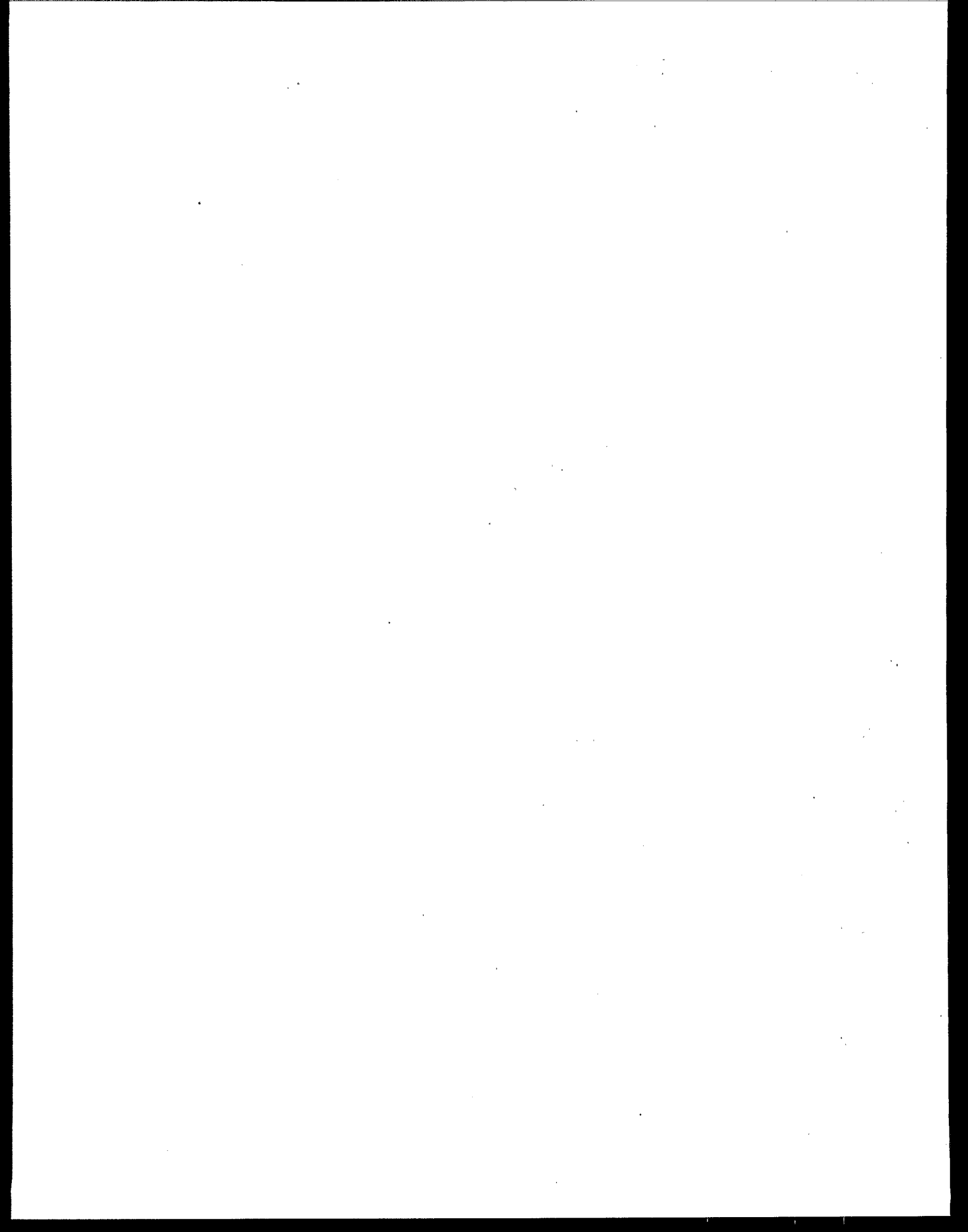
1. Discard coveralls and other absorbent materials that are heavily contaminated with undiluted pesticide having a DANGER or WARNING signal word.
2. Follow Federal, State, and local laws when disposing of PPE that cannot be cleaned correctly.

### Instructions for People Who Clean PPE:

- Inform people who clean or launder PPE:
- ◆ that PPE may be contaminated with pesticides,
  - ◆ of the potentially harmful effects of exposure to pesticides,
  - ◆ how to protect themselves when handling PPE,
  - ◆ how to clean PPE correctly.

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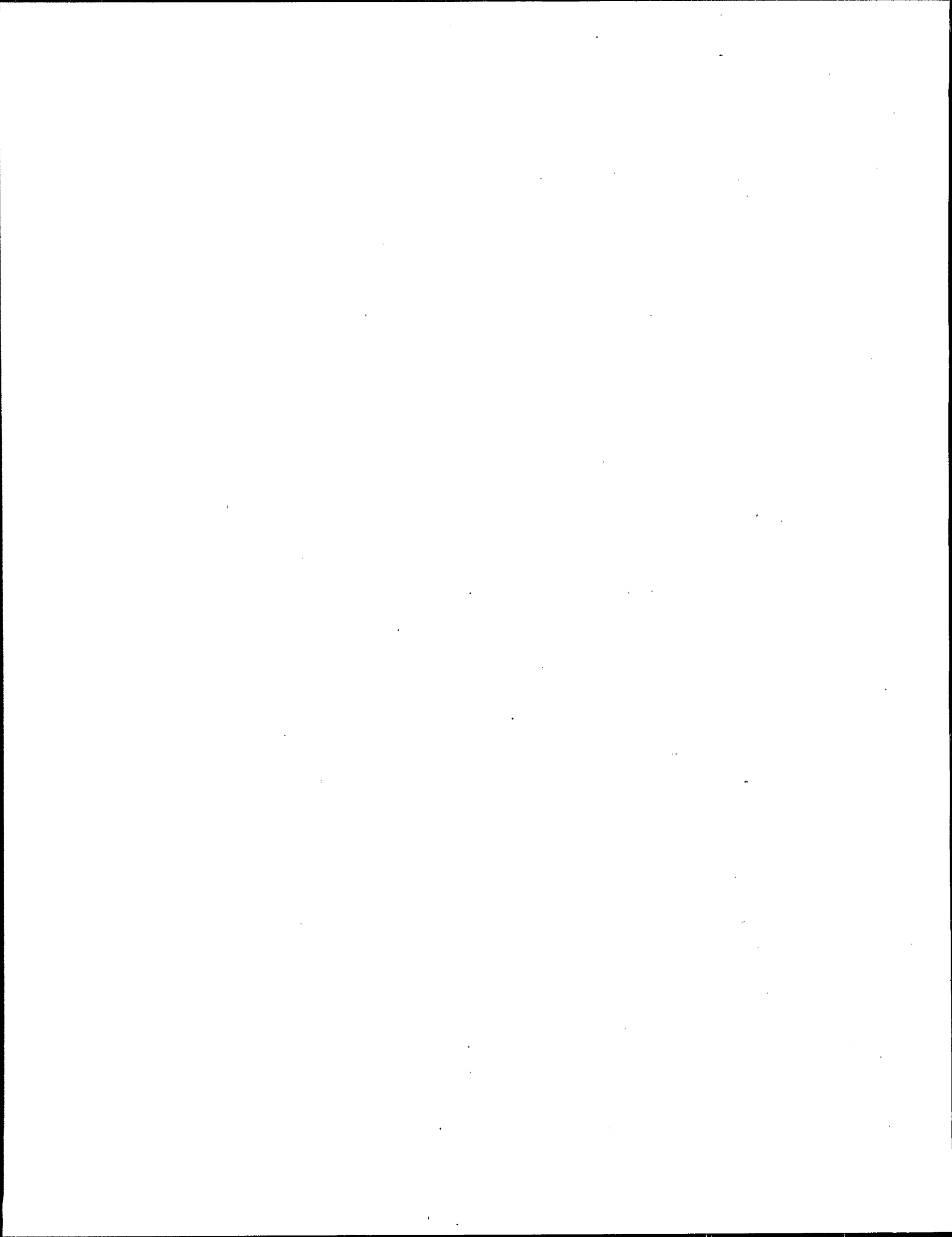
## UNIT 2

# An Introduction to the Worker Protection Standard



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# What Is the Worker Protection Standard?

The Worker Protection Standard (WPS) is a regulation issued by the U.S. Environmental Protection Agency. It covers pesticides that are used in the production of agricultural plants on farms, forests, nurseries, and greenhouses. The WPS requires you to take steps to reduce the risk of pesticide-related illness and injury if you (1) use such pesticides, or (2) employ workers or pesticide handlers who are exposed to such pesticides.

If you are an agricultural pesticide user and/or an employer of agricultural workers or pesticide handlers, the WPS requires you to provide to your employees and, in some cases, to yourself and to others:

- ◆ information about exposure to pesticides,
- ◆ protections against exposures to pesticides, and
- ◆ ways to mitigate exposures to pesticides.

## Information

To ensure that employees will be informed about exposure to pesticides, the WPS requires:

- ◆ **Pesticide safety training**—for workers and handlers,
- ◆ **Pesticide safety poster**—to be displayed for workers and handlers,
- ◆ **Access to labeling information**—for pesticide handlers and early-entry workers, and
- ◆ **Access to specific information**—a centrally located Application List of pesticide treatments on the establishment.

## Protection

To ensure that employees will be protected from exposures to pesticides, the WPS requires employers to:

- ◆ **prohibit handlers from applying a pesticide in a way that will expose workers or other persons,**
- ◆ **exclude workers from areas being treated with pesticides,**
- ◆ **exclude workers from areas that remain under a restricted-entry interval (REI), with narrow exceptions,**





- ◆ **protect early-entry workers** who are doing permitted tasks in treated areas during an REI—requirements include special instructions and duties related to correct use of personal protective equipment (PPE),
- ◆ **notify workers** about treated areas so they can avoid inadvertent exposures, and
- ◆ **protect handlers during handling tasks**—requirements include monitoring while handling highly toxic pesticides and duties related to correct use of PPE.

## Mitigation

To mitigate pesticide exposures that employees receive, the WPS requires:

- ◆ **Decontamination sites**—providing handlers and workers an ample supply of water, soap, and towels for routine washing and emergency decontamination,
- ◆ **Emergency assistance**—making transportation available to a medical care facility if an agricultural worker or handler may have been poisoned or injured by a pesticide, and providing information about the pesticide(s) to which the person may have been exposed.

These key terms have very specific meanings in the WPS. Note that these definitions may be different from definitions found in other State and Federal laws and regulations.

### Terms You Need To Know

These definitions will help you determine whether you are affected by the Worker Protection Standard.

**Agricultural plants:** Plants grown or maintained for commercial or research purposes. Examples: food, feed, and fiber plants, trees, turf grass, flowers, shrubs, ornamentals, and seedlings.

**Farms:** Operations, other than nurseries or forests, that produce agricultural plants outdoors.

**Forests:** Operations that produce agricultural plants outdoors for wood fiber or timber products.

**Greenhouses:** Operations that produce agricultural plants indoors in an area that is enclosed with nonporous covering and that is large enough to allow a person to enter. Examples: polyhouses, mushroom houses and caves, and rhubarb houses, as well as traditional greenhouses. Malls, atriums, conservatories, arboretums, and office buildings that grow or maintain plants primarily for decorative or environmental benefits are **not** included.



**Terms You Need To Know (continued)**

**Nurseries:** Operations that produce agricultural plants outdoors for:

- ◆ transplanting to another location, or
- ◆ flower or fern cuttings.

Examples: Flowering and foliage plants or trees; tree seedlings; live Christmas trees; vegetable, fruit, and ornamental transplants; and turf grass produced for sod.

2



# Does the Worker Protection Standard Apply to You?

You need the information in this manual if:

- ◆ You own or manage a farm, forest, nursery, or greenhouse where pesticides are used in the production of agricultural plants.

Even if you are the owner of the farm, forest, nursery, or greenhouse and you or members of your family do all the work there, you are a "WPS employer." You must comply with SOME of the requirements described in this manual, such as restricted-entry intervals and personal protective equipment, and ALL the specific requirements listed in the pesticide labeling. See Agricultural Owner Exemptions, pp. 91-93.

- ◆ You hire or contract for the services of agricultural workers to do tasks related to the production of agricultural plants on a farm, forest, nursery, or greenhouse. This includes labor contractors and others who contract with growers to supply agricultural laborers.
- ◆ You operate a business in which you (or people you employ) apply pesticides that are used for the production of agricultural plants on any farm, forest, nursery, or greenhouse.

Commercial pesticide handlers and their employees are included with respect to such pesticides even if the pesticide handling task (mixing, loading, disposal, etc.) takes place somewhere other than the farm, forest, nursery, or greenhouse—at the commercial handling establishment or an airport hangar, for example.

- ◆ You operate a business in which you (or people you employ) perform tasks as a crop advisor on any farm, forest, nursery, or greenhouse.



**“Crop advisor” means any person who is assessing pest numbers or damage, pesticide distribution, or the status, condition, or requirements of agricultural plants. Examples include crop consultants and scouts. For a description of WPS provisions for crop advisors, see pp. 95–98.**

**If you are in any of these categories, you must comply with the Environmental Protection Agency’s 1992 Worker Protection Standard (40 CFR Part 170). By following the instructions in this manual and the specific requirements in the pesticide labeling, you will be complying with the Standard.**





# Who Does the WPS Protect?

- ◆ The WPS requires employers to take steps to protect two types of agricultural employees: **workers** and **pesticide handlers**. The terms “worker” and “pesticide handler” are defined very specifically in the WPS, and employers of persons who meet these definitions must comply with the WPS. Depending on the tasks being performed, you may need to provide the same employee with worker protections on some occasions and pesticide handler protections on other occasions.
- ◆ Owners of agricultural establishments and members of their immediate families are exempt from many WPS requirements. See Exemptions for Agricultural Owners, pp. 91–93.

Under the WPS, you may be both a worker and an employer of workers.

## Workers

A worker is anyone who: (1) is employed (including self-employed) for any type of compensation and (2) is doing tasks, such as harvesting, weeding, or watering, relating to the production of agricultural plants on a farm, forest, nursery, or greenhouse. This term does NOT include persons who are employed by a commercial establishment to perform tasks as crop advisors (see Protections for Crop Advisors, pp. 95–98).

Under the WPS, you may be both a handler and an employer of handlers.

## Pesticide Handlers

A pesticide handler is anyone who: (1) is employed (including self-employed) for any type of compensation by an agricultural establishment or a commercial pesticide handling establishment that uses pesticides in the production of agricultural plants on a farm, forest, nursery, or greenhouse, and (2) is doing any of the following tasks:

- ◆ mixing, loading, transferring, or applying pesticides,
- ◆ handling opened containers of pesticides,
- ◆ acting as a flagger,
- ◆ cleaning, handling, adjusting, or repairing the parts of mixing, loading, or application equipment that may contain pesticide residues,
- ◆ assisting with the application of pesticides, including incorporating the pesticide into the soil after the application has occurred,





### **Pesticide Handlers, *continued***

- ◆ entering a greenhouse or other enclosed area after application and before the inhalation exposure level listed on the product labeling has been reached or one of the WPS ventilation criteria has been met to:
  - ◆ operate ventilation equipment,
  - ◆ adjust or remove coverings, such as tarps, used in fumigation, or
  - ◆ check air concentration levels,
- ◆ entering a treated area outdoors after application of any soil fumigant to adjust or remove soil coverings, such as tarpaulins,
- ◆ performing tasks as a crop advisor:
  - ◆ during any pesticide application,
  - ◆ before any inhalation exposure level or ventilation criteria listed in the labeling has been reached or one of the WPS ventilation criteria has been met,
  - ◆ during any restricted-entry interval,
- ◆ disposing of pesticides or pesticide containers.

A person is NOT a handler if he or she only handles pesticide containers that have been emptied or cleaned according to instructions on pesticide product labeling or, if the labeling has no such instructions, have been triple-rinsed or cleaned by an equivalent method, such as pressure rinsing.

A person is NOT a handler if he or she (1) is only handling pesticide containers that are unopened AND (2) is not, at the same time, also doing any handling task (such as mixing or loading).

#### ***Examples:***

You ARE a handler if you are loading unopened water-soluble packets into a mixing tank (because you are mixing and loading the pesticide).

You are NOT a handler if you:

- ◆ purchase pesticides and transport them unopened to an establishment.
- ◆ carry unopened containers into a pesticide storage facility.
- ◆ transport unopened containers to the site where they are to be mixed, loaded, or applied.

- ◆ **Handlers who are**
- ◆ **currently certified as**
- ◆ **applicators of**
- ◆ **restricted-use**
- ◆ **pesticides must be**
- ◆ **given all of the WPS**
- ◆ **handler protections,**
- ◆ **except that they**
- ◆ **need not receive**
- ◆ **WPS training.**



## Which Pesticide Uses Are Covered?

- ♦ Most pesticide uses involved in the production of agricultural plants on a farm, forest, nursery, or greenhouse are covered by the WPS. This includes pesticides used on plants, and pesticides used on the soil or planting medium the plants are (or will be) grown in. Both general-use and restricted-use pesticides are covered by the WPS. You will know that the product is covered by the WPS if you see the following statement in the Directions for Use section of the pesticide labeling:

### **“Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment, notification of workers, and restricted-entry intervals.”

- ♦ If you are using a pesticide product with labeling that refers to the Worker Protection Standard, you must comply with the WPS.
- ♦ Otherwise, you will be in violation of Federal law, since it is illegal to use a pesticide product in a manner inconsistent with its labeling.



# Which Pesticide Uses Are Not Covered?

Some pesticide uses are not covered by the WPS, even when the Agricultural Use Requirements section is on the labeling. For example, if the pesticide labeling bears an Agricultural Use Requirements section, but the product also can be applied to rights-of-way, the rights-of-way use is not covered by the WPS. The WPS does NOT cover pesticides applied:

- ◆ on pastures or rangelands,
- ◆ for control of vertebrate pests such as rodents,
- ◆ as attractants or repellents in traps,
- ◆ on the portions of agricultural plants that have been harvested, such as in packing houses or on cut timber,
- ◆ for mosquito abatement, Mediterranean fruit fly eradication, or similar government-sponsored wide-area public pest control programs,
- ◆ on livestock or other animals, or in or around animal premises,
- ◆ on plants grown for other than commercial or research purposes, which may include plants in habitations, home fruit and vegetable gardens, and home greenhouses,
- ◆ on plants that are in ornamental gardens, parks, golf courses, and public or private lawns and grounds and that are intended only for decorative or environmental benefit,
- ◆ in a manner not directly related to the production of agricultural plants, including, for example, control of vegetation along rights-of-way and in other noncrop areas, and structural pest control, such as termite control and wood preservation,
- ◆ for research uses of unregistered pesticides.

The WPS does not cover **workers** who are working in an area where a pesticide has been injected directly into the plants. However, people who **handle** pesticides that are to be applied by direct injection **ARE** covered by the WPS and must receive handler protections.



◆ Pesticides used on  
◆ sod farms **ARE**  
◆ covered by the WPS.

◆ Direct injection does  
◆ not include  
◆ chemigation, soil  
◆ incorporation, soil  
◆ injection, hack and  
◆ squirt, or frill and  
◆ spray.



# Who Must Protect Workers and Handlers?

- ◆ **Employers** are responsible for making sure that workers and handlers receive the protections required by the pesticide labeling and the WPS. The term "employer" has a special meaning in the WPS—you are an employer even though you are self-employed or use only members of your own family to do the work on your establishment.
- ◆ The WPS has very specific definitions for two types of employers.
- ◆ WPS requirements apply only to employers who meet those definitions.

**Compensation:** Pay or wages, payment through services or goods, or barter of services or goods. If only one person receives payment for the joint work of several people, all are considered to be compensated, and are employees under the WPS. For example, under a piece-rate payment system for harvesting crops, even if payment is issued to the head of the family only, all of the family members who harvest crops are considered employees under the WPS.

## WPS Employer Definitions

### Worker Employers:

Worker employers (called "agricultural employers" in the WPS) are people who:

- ◆ **employ or contract for the services of workers** (including themselves and members of their families) for any type of compensation to perform tasks related to the production of agricultural plants, or
- ◆ **own or operate** an agricultural establishment that uses such workers.

(See definition of "owner," p. 91.)

(See definition of "worker," p. 14.)

If you are a worker employer, you are responsible for providing your agricultural worker employees with the protections that the WPS requires for **workers**.

### Handler Employers:

Handler employers are people who:

- ◆ **employ pesticide handlers** (including members of their family), for any type of compensation, or
- ◆ **are self-employed as pesticide handlers**.

(See definition of "pesticide handler," pp. 14–15.)

If you are a handler employer, you are responsible for providing the pesticide handlers you employ with the protections that the WPS requires for **handlers**.



## If You Employ Supervisors

You must:

- ◆ require them to make sure the workers and handlers they supervise comply with the WPS and receive its protections,
- ◆ give them enough information and directions about the WPS requirements to make sure that the workers and handlers they supervise receive the protections required by the WPS, and
- ◆ tell them who is responsible for all actions necessary for compliance with the WPS.

Even if you assign an employee to carry out the duties required by the WPS, **you are responsible** for making sure that all those duties are performed.

### Retaliation Prohibited

You and your supervisors must not prevent or discourage any worker or handler from complying or attempting to comply with the WPS, and you must not fire or otherwise retaliate against any worker or handler who attempts to comply.

### Penalties for Noncompliance

The penalty for not complying with the Federal Worker Protection Standard is the same as the penalty for using a pesticide in a manner inconsistent with its labeling. In general, the fines can be up to \$1,000 per offense for private applicators (owners/operators of agricultural establishments) and other persons and up to \$5,000 per offense for commercial applicators (owners/operators of commercial pesticide handling establishments) and other persons. If the WPS is knowingly violated, the criminal penalty can be up to \$1,000 and 30 days in jail for private applicators and up to \$25,000 and 1 year in jail for commercial applicators. Most States and Tribes enforce under their own laws and regulations and have their own penalties that may differ from Federal penalties. In addition, some local governments may impose their own pesticide-related ordinances and may impose their own penalties.





## WPS and Labeling

### Labeling Overrides WPS:

If the pesticide product labeling contains specific instructions or requirements that conflict with the requirements of the Worker Protection Standard, **follow the instructions or requirements on the labeling**. For example, some pesticide labeling may:

- ◆ prohibit any early-entry activity, including short-term and emergency tasks.
- ◆ allow an early-entry activity that the WPS does not allow.
- ◆ require the use of personal protective equipment even if closed systems are used for mixing and loading.

### Exceptions to Labeling Statements:

The WPS allows you to make certain exceptions to three specific pesticide labeling requirements: **personal protective equipment, restricted-entry intervals, and double notification** (the requirement on some labeling for both oral warnings and posting treated areas). The WPS statements in the Agricultural Use Requirements box on the product labeling will tell you that the WPS contains these exceptions.

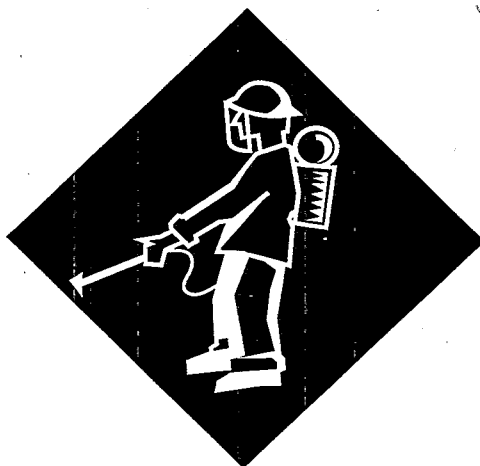


## UNIT 3

# What Employers Must Do for Both Workers and Handlers

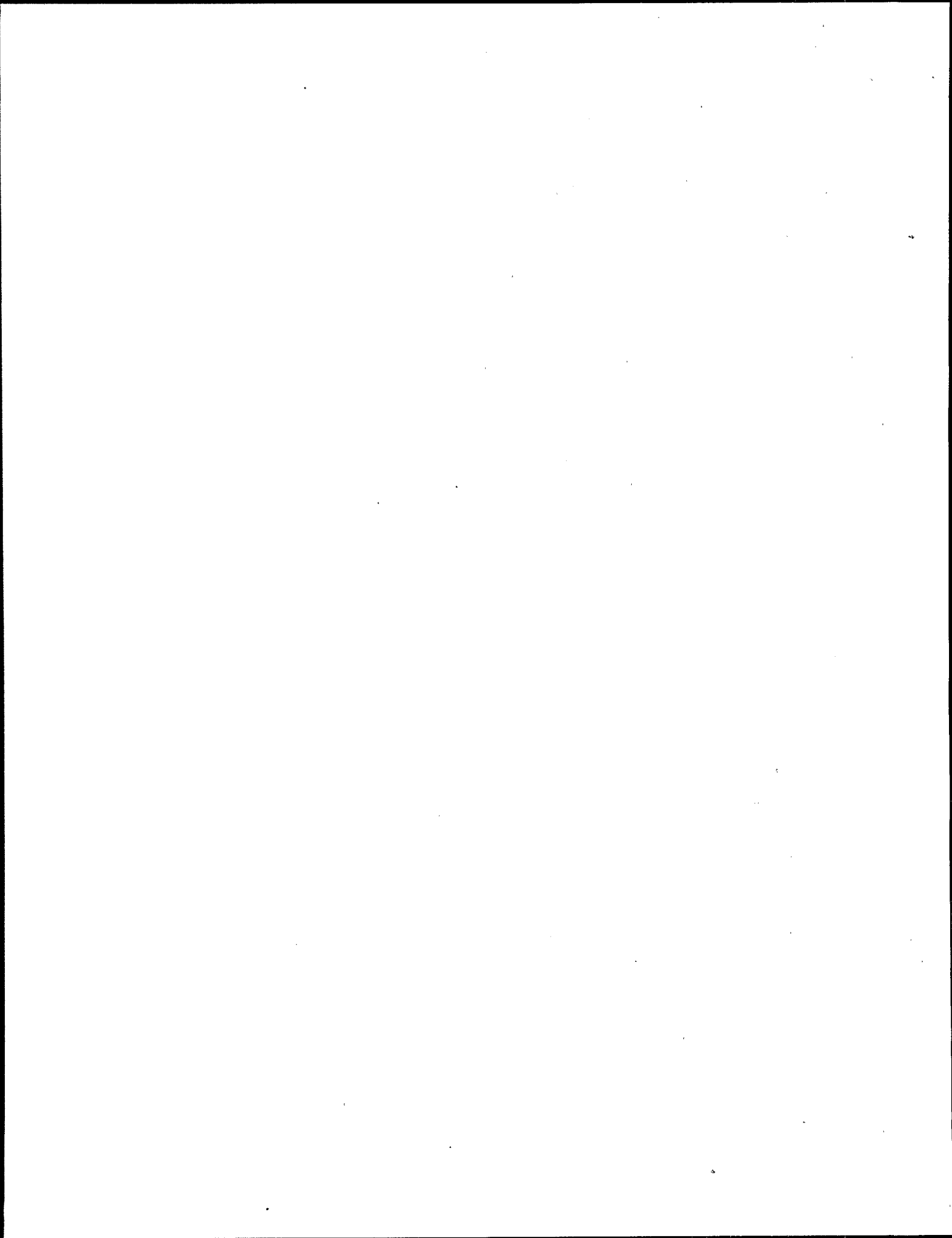
Some WPS protections that employers must provide are nearly the same whether the employees are workers or handlers. This unit describes those requirements. Unit 4 describes additional requirements that employers must provide to their employees who are **workers**. Unit 5 describes additional requirements that employers must provide to their employees who are **handlers**. If you employ both workers and handlers, you will need to read all three of these units.

3



Information at a Central Location .....	23
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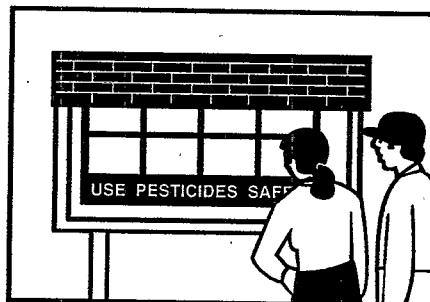




# Information at a Central Location

## Basic Responsibilities

Worker employers must make sure that certain information, described below, is displayed at a central location whenever (1) any worker whom they employ is on their agricultural establishment, and (2) a pesticide is about to be applied or has been recently applied.



When agricultural establishments employ their own handlers, handler employers of such establishments must make sure that certain information, described below, is displayed at a central location whenever (1) any handler whom they employ is on their agricultural establishment, and (2) a pesticide is about to be applied or has been recently applied. However, this information does not need to be displayed if only commercial (custom) pesticide handlers will be on the agricultural establishment.

## Specific Duties

### What Information Must Be Displayed?

The following three types of information must be displayed:

1. **Application list**, which must include:
  - ◆ the location and description of the area to be treated,
  - ◆ product name, EPA registration number, and active ingredient(s) of the pesticide,
  - ◆ time and date the pesticide is scheduled to be applied, and
  - ◆ restricted-entry interval for the pesticide.
2. **Emergency information**, which must include the name, telephone number, and address of the nearest emergency medical facility.
3. A **pesticide safety poster**, which must be either the WPS safety poster developed by EPA or an equivalent poster that contains the concepts listed in Criteria for Pesticide Safety Poster, p. 101.

◆ **Commercial pesticide handler employers do NOT need to display this information on the commercial pesticide handling establishment.**

◆ **If the pesticide is not applied as scheduled, you must list the corrected time and date the application takes place. List the correction before the application takes place or as soon as practicable thereafter.**

3



**Earlier display:**  
If you post WPS warning signs at treated areas, you must display the application list at the central location no later than the time when the warning signs are posted.

- ◆ **Where Must the Information Be Displayed?**

- ◆ Display the required information together in a central location on your agricultural establishment where it can be easily seen and read by workers and handlers.

- ◆ **Exception:**

- ◆ If the workplace is a forest, you may display the information near the forest. It must be in a location where workers and handlers can easily see and read it and where they are likely to gather or pass by. For example, you might display the information at a decontamination site or an equipment storage site.

- ◆ **When Must the Information Be Displayed?**

- ◆ Display the information whenever any worker or handler you employ is on your agricultural establishment and, in the past 30 days, a pesticide has been applied or a restricted-entry interval has been in effect. It may be displayed continuously.

- ◆ **Timing of Application List Information**

- ◆ 1. If workers or handlers are on your establishment at the start of an application, record the required pesticide-specific information on the application list and display it **before the application takes place.**
- ◆ 2. If workers or handlers are NOT on your establishment at the start of an application, display pesticide-specific information **no later than the beginning of their first work period.**
- ◆ 3. Continue to display pesticide-specific information when workers or handlers are on your establishment **until:**
  - ◆ at least 30 days after the restricted-entry interval expires, or
  - ◆ at least 30 days after the end of the application, if there is no restricted-entry interval for the pesticide.

- ◆ **Other Responsibilities**

- ◆ 1. Inform workers and handlers where the information is located.
- ◆ 2. Allow workers and handlers access to the information.
- ◆ 3. Be sure that the poster, emergency information, and application list remain legible during the time they are posted.
- ◆ 4. Promptly inform workers if there is any change in the information on emergency medical facilities and update the emergency information listed with the poster.



# Pesticide Safety Training

## Basic Responsibilities

**Handler employers** must make sure that **handlers** are trained, as described below, about general pesticide safety and about correct ways to handle pesticides.



**Worker employers** must make sure that **workers** have been trained, as described below, about general pesticide safety. This includes workers who enter treated areas on the farm, forest, nursery, or greenhouse during a restricted-entry interval to perform WPS-permitted tasks.

## Specific Duties

### Who Must Be Trained?

Each worker and handler must be trained.

This requirement is met if the worker or handler:

1. has been trained within the last 5 years as a WPS handler or WPS worker, even if he or she has changed employers, OR
2. is currently a certified applicator of restricted-use pesticides, OR
3. is currently trained (as specified in EPA's certification and training regulations) as a handler who works under the supervision of a certified pesticide applicator.

### How Soon Must They Be Trained?

1. **Handlers** must be trained before they do any handling task.
2. **Early-entry workers who will contact anything** that has been treated with the pesticide which caused the restricted-entry interval must be trained **BEFORE** they do any early entry task on your establishment.
3. **Early-entry workers who will NOT contact anything** that has been treated with the pesticide which caused the restricted-entry interval must be trained in the same time period as that described for workers below.
4. **Workers** must be trained before they accumulate more than 5 separate days of entry into treated areas on your establish-

3

♦ **Entry during a**  
♦ **restricted-entry**  
♦ **interval is permitted**  
♦ **only in a few strictly**  
♦ **limited circumstances;**  
♦ **see Early Entry,**  
♦ **pp. 45-47, 59-61.**



- ♦ ment where, within the past 30 days, a pesticide has been
- ♦ applied or a restricted-entry interval has been in effect.
- ♦ These 5 days of such entry need not be consecutive and may
- ♦ occur over several periods of employment or over several
- ♦ seasons or years.
- ♦ **Exception:**
- ♦ Starting on April 15, 1994, and until October 20, 1997, workers
- ♦ must be trained about general pesticide safety before they
- ♦ accumulate more than 15 separate days of entry into such treated
- ♦ areas on your establishment.
- ♦
- ♦ **How Often Must Handlers and Workers Be Trained?**
- ♦ Handlers and workers must be trained at least once every 5 years,
- ♦ counting from the end of the month in which the previous
- ♦ training was completed.
- ♦
- ♦ **Who Can Conduct Training?**
- ♦ 1. The person who conducts **handler** training must:
- ♦ ♦ currently be a certified applicator of restricted-use
- ♦ pesticides (in any category of certification),
- ♦ OR
- ♦ ♦ currently be designated as a trainer of certified pesticide
- ♦ applicators or pesticide handlers by a State, Federal, or
- ♦ Tribal agency having jurisdiction,
- ♦ OR
- ♦ ♦ have completed a pesticide safety train-the-trainer program
- ♦ approved by a State, Federal, or Tribal agency having
- ♦ jurisdiction.
- ♦ 2. The person who conducts **worker** training must:
- ♦ ♦ currently be qualified to present handler training, as
- ♦ described immediately above,
- ♦ OR
- ♦ ♦ currently be trained (as specified in EPA's certification and
- ♦ training regulations) as a handler who works under the
- ♦ supervision of a certified pesticide applicator,
- ♦ OR
- ♦ ♦ currently be trained as a WPS handler,
- ♦ OR
- ♦ ♦ have completed a pesticide safety train-the-trainer program
- ♦ approved by a State, Federal, or Tribal agency having
- ♦ jurisdiction.
- ♦



## How To Conduct Training

1. Anyone who conducts **worker** or **handler** training must:
  - ◆ use written and/or audiovisual materials,
  - ◆ present the training orally or audiovisually,
  - ◆ present the information in a manner that the trainees can understand, using a translator, if necessary,
  - ◆ respond to trainees' questions.
2. Anyone who conducts **worker** training must use non-technical terms.

## Content of Training

The pesticide safety training materials for **workers and handlers** must be either:

- ◆ WPS training materials developed by EPA,  
OR
- ◆ equivalent material that contains at least the concepts listed in Criteria for Worker and Handler Training, pp. 103 and 104.

## Verification of Training

If you make sure that a **handler** has an EPA-approved WPS handler training card or that a **worker** has an EPA-approved WPS worker or handler training card, the person does not have to be retrained **UNLESS** you are aware, or have reason to know, that the card is invalid.

**A WPS training card is invalid if you, the employer:**

- ◆ are aware, or have reason to know, that the card was not issued according to the criteria in the WPS. For example, you know that the person who gave the training was not qualified to conduct WPS training, or that the content of the training did not meet the WPS criteria, or the trainee could not understand the training when it was given.  
OR
- ◆ are aware, or have reason to know, that the card was not issued to the person who has the card.  
OR
- ◆ know that the training for which the card was issued took place more than 5 years before the beginning of the current month (the card has expired).





## ♦ Avoiding Discrimination in Hiring

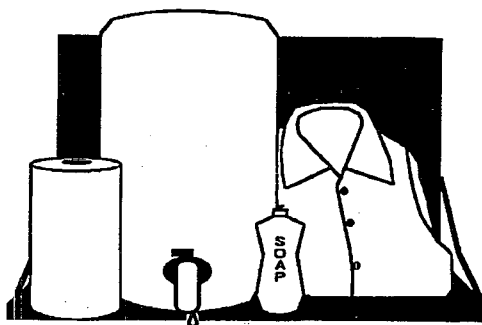
- ◆ Even if you do not normally provide training in the particular language of a job applicant, or if a translator is not readily available, you are not exempted from your training responsibilities under the WPS. Refusing to hire an applicant who cannot understand the language or languages in which you usually provide training may constitute discrimination on the basis of national origin. Such discrimination is actionable under Title VII of the Civil Rights Act of 1964 or the Immigration Reform and Control Act of 1986 (IRCA).
- ◆ If you want information about your responsibilities under Title VII of the Civil Rights Act of 1964, contact the U.S. Equal Employment Opportunity Commission. For details about IRCA anti-discrimination provisions, contact the Special Counsel for Immigration-Related Unfair Employment Practices, U.S. Department of Justice.



# Decontamination Sites

## Basic Responsibilities

**Handler employers** must make sure that a decontamination site (described below) for washing off pesticides and pesticide residues is provided to **handlers** while they are doing handling tasks.



**Worker employers** must make sure that a decontamination site (described below) for washing off pesticide residues is provided to **workers** who are working in a pesticide-treated area and are doing tasks that involve contact with anything that has been treated with the pesticide, including soil, water, or surfaces of plants.

## Specific Duties

### When Must the Site Be Provided?

For **handlers**, for the duration of the handling task.

For **workers**, until 30 days after the end of any restricted-entry interval for that area. If there is no restricted-entry interval, until 30 days after the end of any application in that area.

For **early-entry workers** who will contact anything that has been treated with the pesticide, the decontamination site requirements are different. See Decontamination Sites for Early-Entry Workers, pp. 67-68.

## Supplies

Provide each decontamination site with:

### 1. Water—enough for:

- ◆ routine washing, and
- ◆ emergency eyeflushing.

If the water is stored in a tank, the water must **not** be used for mixing pesticides, unless the tank is equipped with correctly functioning anti-backsiphoning or check valves or other mechanisms (such as air gaps) that prevent pesticides from moving into the tank.

### 2. Soap and single-use towels—enough for workers' or handlers' needs.

The WPS requires that decontamination sites be provided regardless of the number of employees. There is no exemption for employers with only a few employees.

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Decontamination and emergency eyeflush water must, at all times when it is available to workers or handlers, be of a quality and temperature that will not cause illness or injury when it contacts the skin or eyes or if it is swallowed.







2. **Worker** decontamination sites must NOT be in an area being treated with pesticides or in an area under a restricted-entry interval.
3. **Handler** decontamination sites may be located in an area being treated with pesticides (or an area that has a restricted-entry interval in effect), **only if**:
  - ◆ It is in the area where the handler is doing handling tasks,  
AND
  - ◆ The soap, single-use towels, and clean change of clothing are in closed containers,  
AND
  - ◆ The water is running tap water or is in a closed container.

### **Emergency Eyeflushing**

Provide each **handler** with at least 1 pint of emergency eyeflush water when the pesticide labeling requires protective eyewear for the handling task being performed. The emergency eyeflush water must be **immediately accessible**. For example, it could be carried by the handler or be on a vehicle the handler is using. The emergency eyeflush water may be the water at the decontamination site if the decontamination site is immediately accessible.

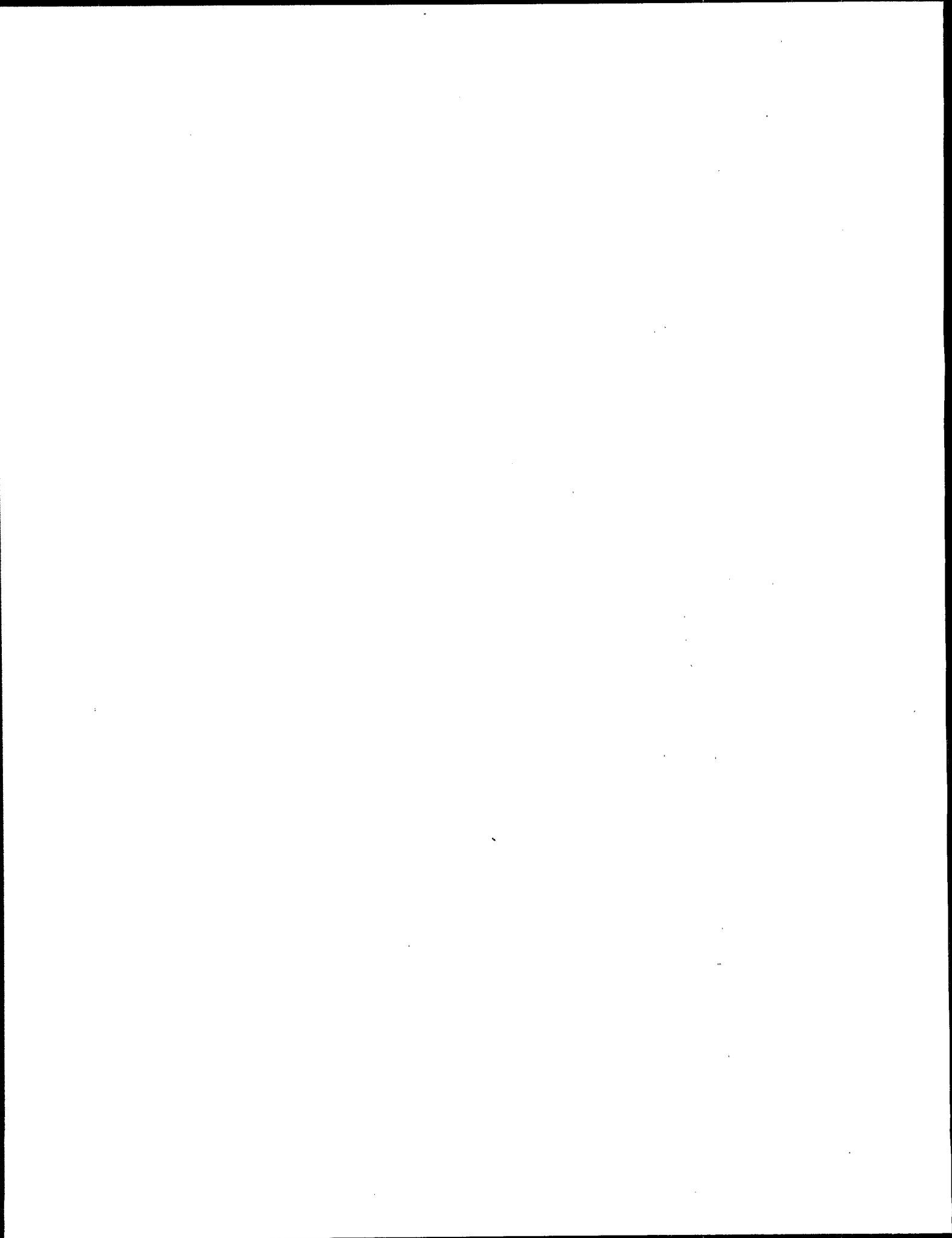
### **Decontamination After Handling Tasks**

At the site where handlers remove their personal protective equipment (PPE), provide:

- ◆ soap,
- ◆ clean towels, and
- ◆ enough water to allow handlers to wash thoroughly after removing PPE.









# Employer Information Exchange

## Basic Responsibilities

Employers of commercial pesticide handlers must make sure that their customer—the operator of the farm, forest, nursery, or greenhouse—knows certain information, described below, about the pesticide before it is applied on the establishment.



Operators of farms, forests, nurseries, and greenhouses (agricultural employers) must make sure that, whenever a commercial handler will be doing pesticide handling tasks (including tasks as a crop advisor) on their establishment, the commercial handler's employer knows specific information, described below, concerning treated areas on the agricultural establishment.

## Specific Duties

### Information for Establishment Operators

Commercial handler employers must inform their customer—the operator of the farm, forest, nursery, or greenhouse—about:

- ◆ the specific location and description of the area(s) on the agricultural establishment that are to be treated with a pesticide,
- ◆ time and date the pesticide is scheduled to be applied,
- ◆ product name, EPA registration number, and active ingredient(s),
- ◆ restricted-entry interval for the pesticide,
- ◆ whether the pesticide labeling requires both treated-area posting and oral notification, and
- ◆ any other specific requirements on the pesticide labeling concerning protection of workers and other persons during or after application.

Operators of agricultural establishments must have this information to protect their employees. See Information at a Central Location, pp. 23–24, and Notice About Applications, pp. 41–44.

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- ◆ If the pesticide is not applied as scheduled, the agricultural employer must be informed of the corrected time and date of the application. Make the correction before the application takes place or as soon as practicable thereafter.



- ◆ Operators of agricultural establishments must provide the following information to the commercial pesticide handler employer that they hire:

- ◆ Operators of commercial pesticide handling establishments must
- ◆ have this information to protect their employees. See Specific
- ◆ Instructions for Handlers, p. 76.

- [illegible]



# Emergency Assistance

## Basic Responsibilities

**Worker employers** must provide emergency assistance, described below, to anyone who is or has been employed as a **worker** on their farm, forest, nursery, or greenhouse if there is reason to believe

that the worker has been poisoned or injured by a pesticide used on the agricultural establishment—for example, through application, spills, splashes, drift, or contact with pesticide residues.

**Pesticide handler employers** must provide emergency assistance, described below, to anyone who is or has been employed as a **handler** on their farm, forest, nursery, or greenhouse or on their commercial pesticide handling establishment, if there is reason to believe that the handler has been poisoned or injured by a pesticide as a result of that employment—for example, through application, spills, splashes, drift, handling tasks, or contact with pesticide residues.



## Specific Duties

### Emergency Transportation

1. Promptly make emergency transportation available to take the **worker** to an emergency medical facility able to provide treatment:
  - ◆ from the agricultural establishment, or
  - ◆ from a labor camp located on the establishment.
2. Promptly make emergency transportation available to take the **handler** to an emergency medical facility able to provide treatment:
  - ◆ from the agricultural establishment, or
  - ◆ from another handling site, such as a commercial handling establishment or an airport hangar.

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- ◆ **Employers can "make transportation available" by:**
- ◆ taking the employee to the emergency medical facility,
- OR
- ◆ calling an emergency vehicle, such as an ambulance,
- OR
- ◆ making sure the employee has a ride to the medical facility with someone else.



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## UNIT 4

# Further Requirements for Employers of Workers

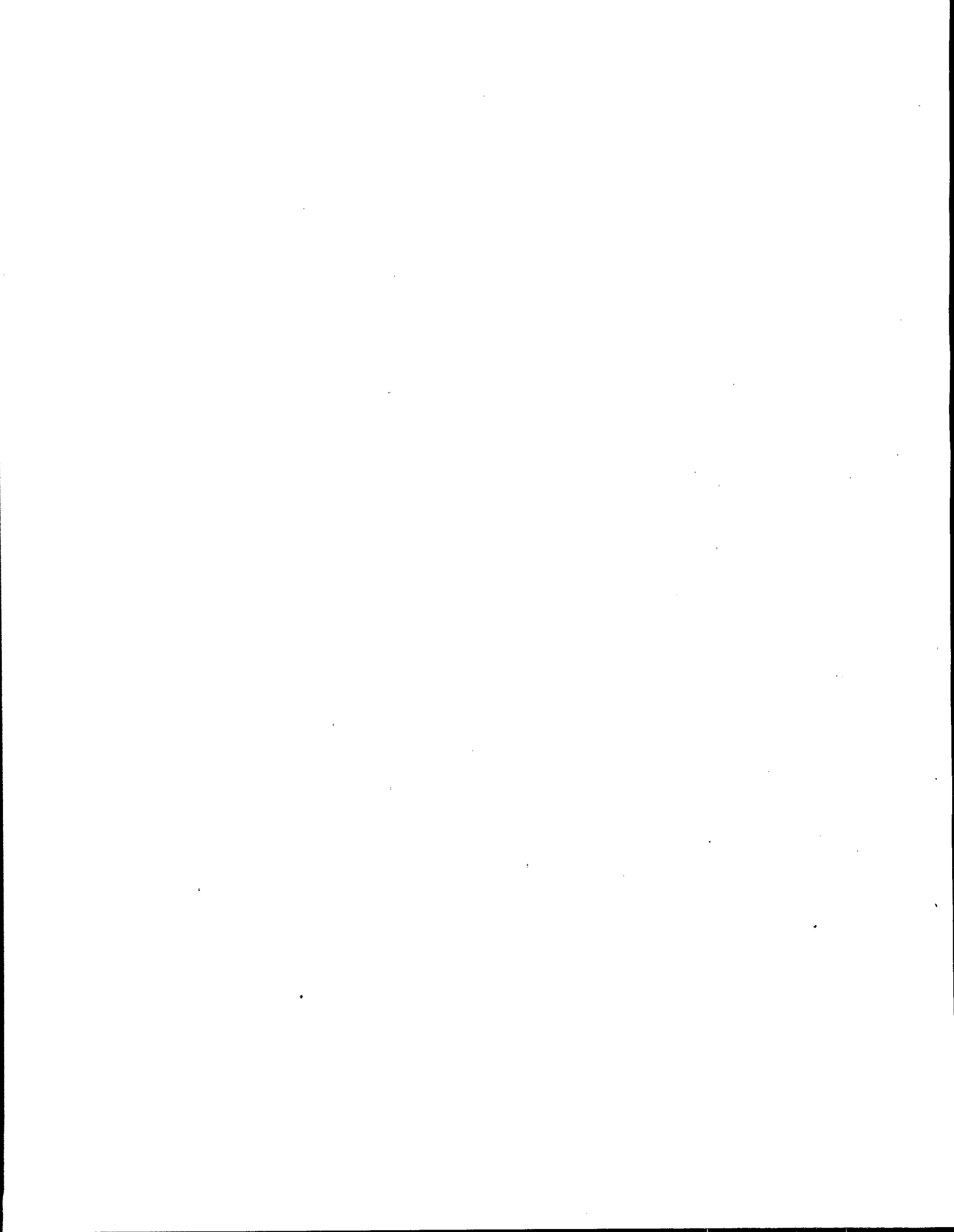
Unit 3 described the WPS protections that employers must provide to both worker and handler employees. This unit describes the additional protections that employers are required to provide to their **worker** employees.



4

Part A - Protections for All Agricultural Workers .....	39
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## Part A

# Protections for All Agricultural Workers

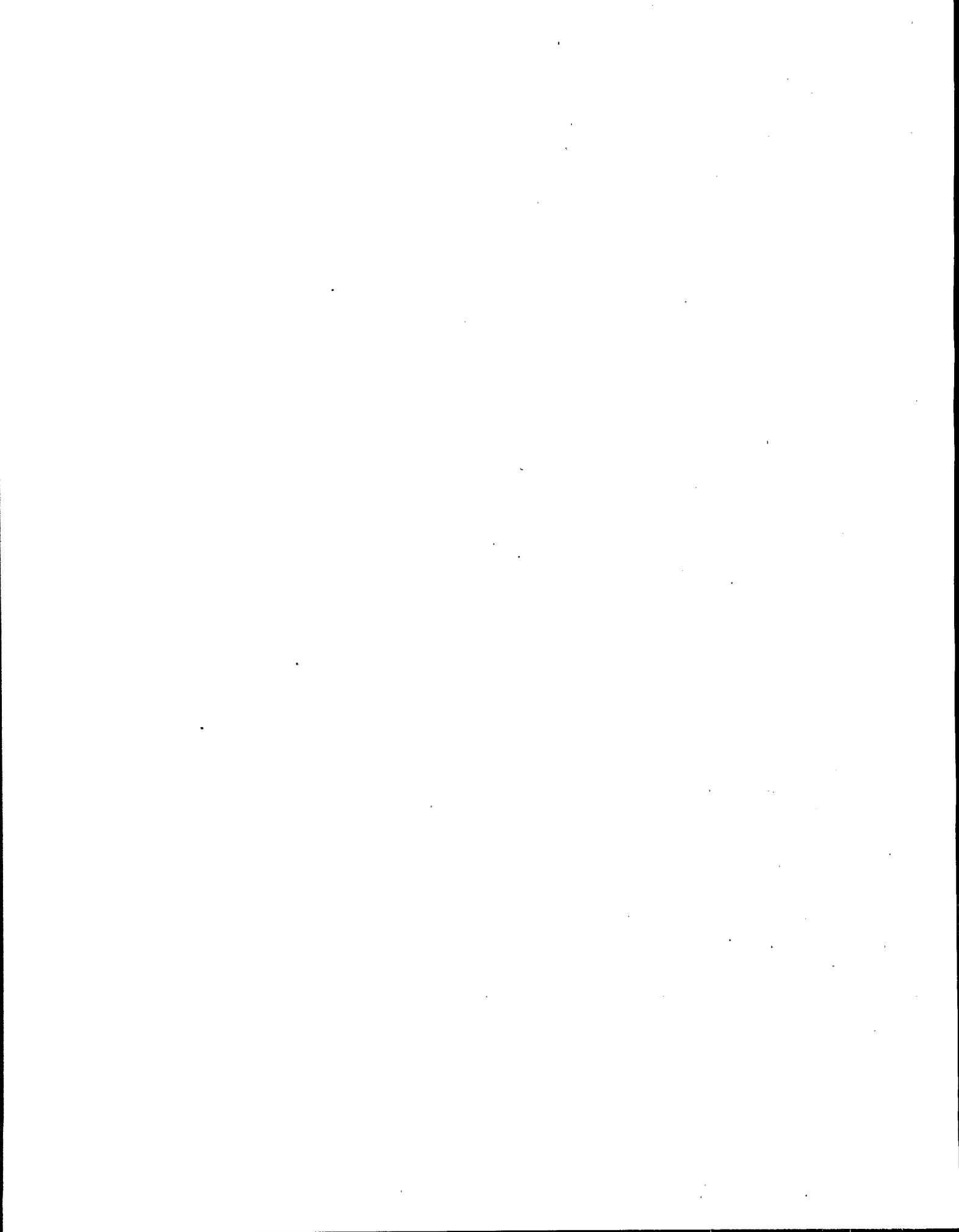
The requirements described in this part are **in addition** to the protections employers must provide to **both** workers and handlers (Unit 3).



**Notice About Applications .....41**

**Restrictions During and After Applications .....45**







# Notice About Applications

## Basic Responsibilities

Under most circumstances, **worker employers** must make sure that **workers** are notified about areas where pesticide applications are taking place or where restricted-entry intervals are in effect.

## Specific Duties

### Both Oral Warning and Posted Signs

Some pesticide labels require you to notify workers **BOTH** orally **AND** with signs posted at entrances to the treated area. If both types of notification are required, the following statement will be in the Directions for Use section of the pesticide labeling under the heading Agricultural Use Requirements:

**"Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas."**

### Notification on Farms, Forests, and Nurseries

Unless the pesticide labeling requires both types of notification, notify workers **EITHER** orally **OR** by the posting of warning signs at entrances to treated areas. You must inform workers which method of notification is being used.

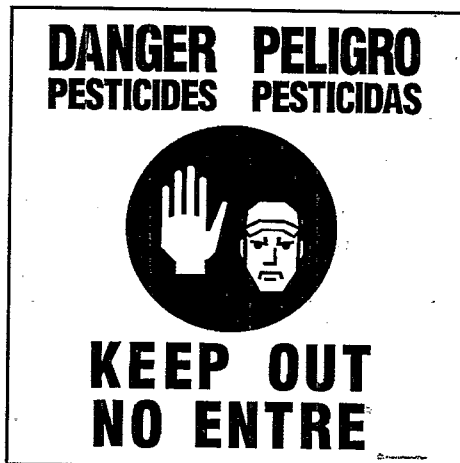
### Notification in Greenhouses

In greenhouses, **you must post all treated areas**, except as described below. If the pesticide labeling requires both types of notification, you must also notify workers orally.

### Exceptions to Worker Notification

#### 1. Oral warnings need NOT be given to:

- ◆ **any worker on your farm, forest, or nursery who will not be in the treated area, or walk within 1/4 mile of a treated area, during the pesticide application or while the restricted-entry interval is in effect,**





Signs meeting these requirements should be available commercially.

- ◆ any worker who will not be in your greenhouse during a pesticide application or while a restricted-entry interval is in effect there, OR
- ◆ any worker who applied (or supervised the application of) the pesticide and is aware of all of the information required to be given in the oral warning.

◆ **2. Treated area posting is NOT required if:**

- ◆ no workers on your farm, forest, or nursery will be in the treated area, or walk within 1/4 mile of the treated area, during the pesticide application or while the restricted-entry interval is in effect,
- ◆ no workers will be in the greenhouse during the pesticide application or while the restricted-entry interval is in effect there, OR
- ◆ the **only** workers for whom you need to post applied (or supervised the application of) the pesticide and are aware of all of the information required to be given in the oral warning.

◆ **Posted Warning Signs**

- ◆ Use WPS-design signs when you post warnings at entrances to treated areas. For a detailed description, see Requirements for Warning Signs, p. 102.

◆ **1. Location:**

- ◆ **On farms, forests, and nurseries,** post the signs so they can be seen from all points where workers usually enter the treated area, including at least:
  - ❖ each access road,
  - ❖ each border with any labor camp adjacent to the treated area, and
  - ❖ each established walking route that enters the treated area.

When there are no usual points of worker entry, post the signs in the corners of the treated area or in places where they will be most easily seen.

- ◆ **In greenhouses,** post the signs so they can be seen from all points where workers usually enter the treated area, including doorways, aisles, and other walking routes. When there are no usual points of worker entry to the treated area, post the signs in the corners of the treated area or in places where they will be easily seen.



## 2. Timing and Visibility of Warning Signs:

- ◆ Post signs 24 hours or less before the scheduled application of the pesticide.
- ◆ Keep signs posted during application and throughout the restricted-entry interval (if any).
- ◆ Remove the signs within 3 days after the end of the restricted-entry interval. If there is no restricted-entry interval for that application, remove the signs within 3 days after the end of the application.
- ◆ Keep workers out during the entire time the signs are posted (except for trained and equipped early-entry workers entering as permitted under WPS).
- ◆ Keep signs visible and legible while they are posted.

## 3. Posting Adjoining Areas

When several adjoining areas are to be treated with pesticides on a rotating or sequential basis, you may post the entire area at the same time. Worker entry, except for early entry permitted by the WPS, is prohibited for the entire area while the signs are posted.

## 4. Design and Size

- ◆ Each warning sign must look like the one at the right.
- ◆ You may put **additional information** on the warning sign, such as the name of the pesticide or the date of application, if it does not lessen the impact of the sign or change the meaning of the required information. If you add the required information in other languages, the words must be translated correctly.
- ◆ The signs must be at least 14 inches by 16 inches, and the letters must be at least 1 inch high.



Red



◆ For a detailed description, see Requirements for Warning Signs, p. 102.

◆ You may use smaller signs if the treated area is too small to accommodate 14- by 16-inch signs. For example, when a single potted plant needs to be posted, a smaller sign would be appropriate.



♦ **Oral Warnings to Workers**

♦ **1. Content**

♦ Oral warnings must include:

- ♦ the location and description of the treated area,
- ♦ the time during which entry is restricted, and
- ♦ instructions not to enter the treated area until the restricted-entry interval has expired.

♦ **2. Communication**

♦ Provide oral warnings to workers in a manner that they can understand.

♦ **3. Timing**

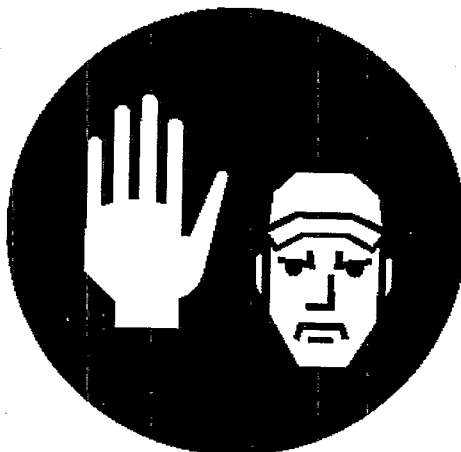
- ♦ Workers who are on your establishment at the start of an application must be orally warned **before the application takes place**.
- ♦ Workers who are NOT on your establishment at the start of an application must be orally warned **at the beginning of their first work period** if (1) the application is still taking place or (2) the restricted-entry interval for the pesticide is in effect.



# Restrictions During and After Applications

## Basic Responsibilities

Worker employers must take actions, described below, to protect **workers and other persons** during pesticide applications on agricultural establishments. **Worker employers** also must take actions, described below, to protect **workers** during restricted-entry intervals.



## Specific Duties

### During Applications

1. Keep everyone except appropriately trained and equipped handlers out of areas being treated with pesticides.
2. In nurseries and greenhouses, during some applications, also keep such persons out of the area **immediately around** the area being treated. The size of this "keep-out zone" depends on the pesticide used and the application method. In some greenhouse situations, the greenhouse must be adequately ventilated before workers are allowed to enter. (See Special Application Restrictions in Nurseries and Greenhouses, pp. 51-52 and 53-55.)

### During Restricted-Entry Intervals

In general, keep workers out of a treated area during the restricted-entry interval. This restriction has only two types of exceptions: (1) early entry **with no contact**, described below, and (2) early entry **with contact** for short-term, emergency, or specially excepted tasks (all described in Early Entry, pp. 59-61). Note, however, that entry into treated areas during a restricted-entry interval is also allowed to perform handling (including crop advisor) tasks as long as the persons entering such areas are trained and equipped as pesticide handlers and receive all other applicable WPS handler protections.

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♦ Entering either  
♦ enclosed or outdoor  
♦ fumigated areas to  
♦ ventilate, remove  
♦ tarps or other  
♦ coverings used in the  
♦ fumigation, or to  
♦ measure air  
♦ concentration levels,  
♦ are **handling tasks**,  
♦ not early entry. Only  
♦ appropriately trained  
♦ and equipped  
♦ handlers can do  
♦ these tasks.



## Restricted-Entry Interval (REI)

The restricted-entry interval is the time immediately after a pesticide application when entry into the treated area is limited. Some pesticides have one REI, such as 12 hours, for all crops and uses. Other products have different REI's depending on the crop or method of application. When two (or more) pesticides are applied at the same time, and have different REI's, you must follow the longer interval.

### Location of REI's on Labeling

The restricted-entry interval is listed on the pesticide labeling:

- ◆ under the heading Agricultural Use Requirements in the Directions for Use section of the pesticide labeling, or
- ◆ next to the crop or application method to which it applies.

### Arid Area REI's

Some pesticide labeling requires a different REI for arid areas. Labeling might say, for example, "72 hours in outdoor areas where average annual rainfall is less than 25 inches a year." You can get information on average annual rainfall for your area from any nearby weather bureau, such as one located at a local airport or one affiliated with the National Oceanographic and Atmospheric Administration.

## No-Contact Early Entry

Avoiding contact by using personal protective equipment does NOT qualify as no-contact early entry.

- ◆ If workers will have no contact with anything that has been treated
- ◆ with the pesticide to which the restricted-entry interval applies,
- ◆ you may permit them to enter pesticide-treated areas when the application is finished.
- ◆ 1. After any inhalation exposure level listed on the product labeling has been reached or any WPS ventilation criteria have been met, you may permit workers into a treated area during an REI if they will **not touch or be touched by any** pesticide residues, including:
  - ◆ on plants, including both agricultural plants and weeds,
  - ◆ on or in soil or planting medium,

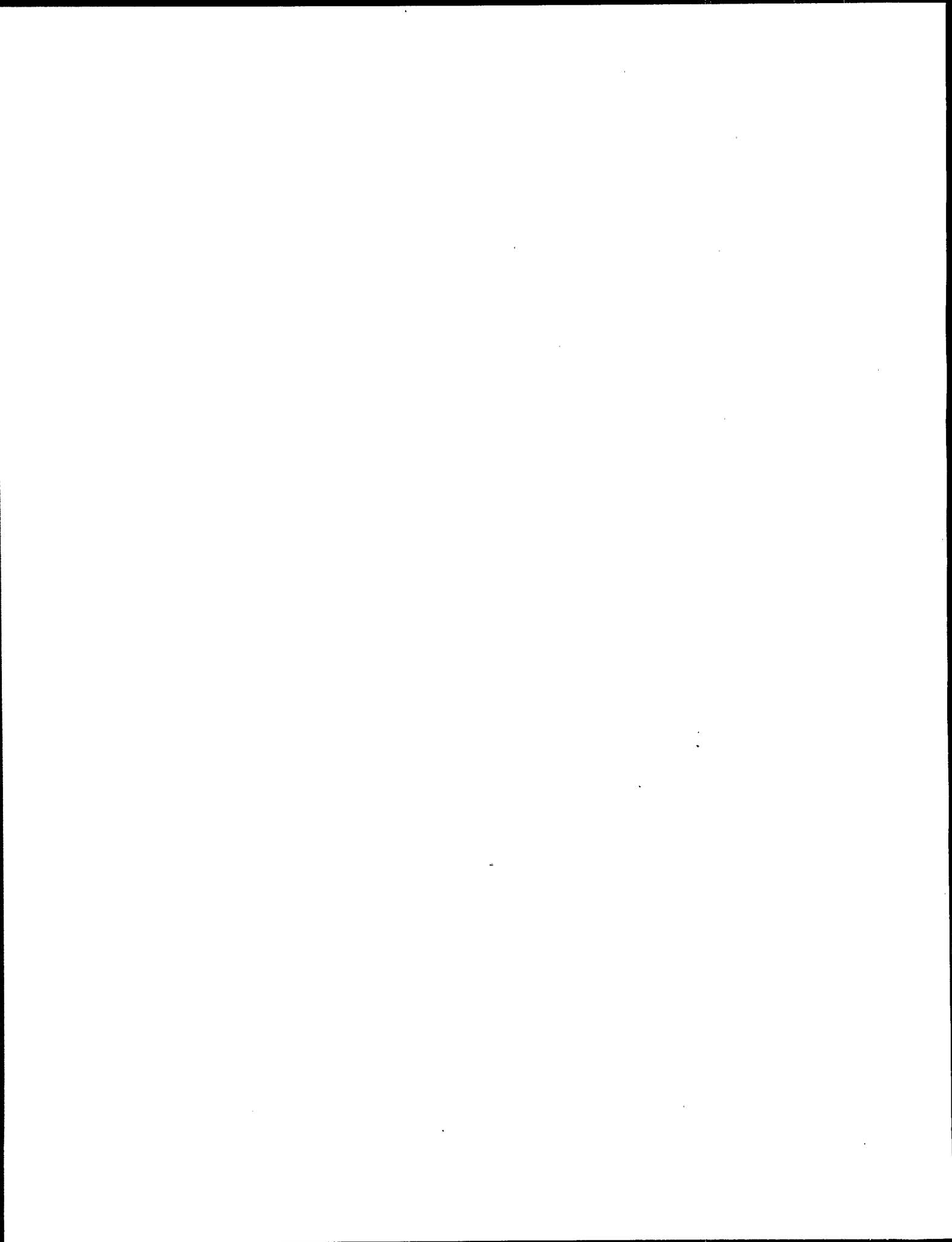


- ◆ **in water**, such as irrigation water or water standing in drainage ditches or puddles,
- ◆ **in air**, if pesticide remains suspended after application, such as after fumigation or after a smoke, mist, fog, or aerosol application.

**No-contact early-entry workers** do NOT have to be provided the special protections required in Early Entry, pp. 63–70. However, they must be provided the following protections offered to other agricultural workers: information at a central location, pesticide safety training for workers, notification, restrictions during applications and during restricted-entry intervals, and emergency assistance. Decontamination sites, however, need NOT be provided to no-contact early-entry workers.

2. The following are examples of situations where a worker would NOT be expected to contact pesticide residues in a treated area after sprays, dusts, and vapors have settled out of the air:
  - ◆ The worker is wearing footwear and is walking in aisles or on roads, footpaths, or other pathways through the treated area where the plants or other treated surfaces cannot brush against the worker and cannot drop or drip pesticides onto the worker.
  - ◆ The worker is in an open-cab vehicle in a treated area where the plants cannot brush against the worker and cannot drop or drip pesticide onto the worker.
  - ◆ After a pesticide application that is incorporated or injected into the soil, the worker is doing tasks that do not involve touching or disrupting the soil subsurface.
  - ◆ The worker is in an enclosed cab on a truck, tractor, or other vehicle.







## Part B

# Special Application Restrictions in Nurseries and Greenhouses

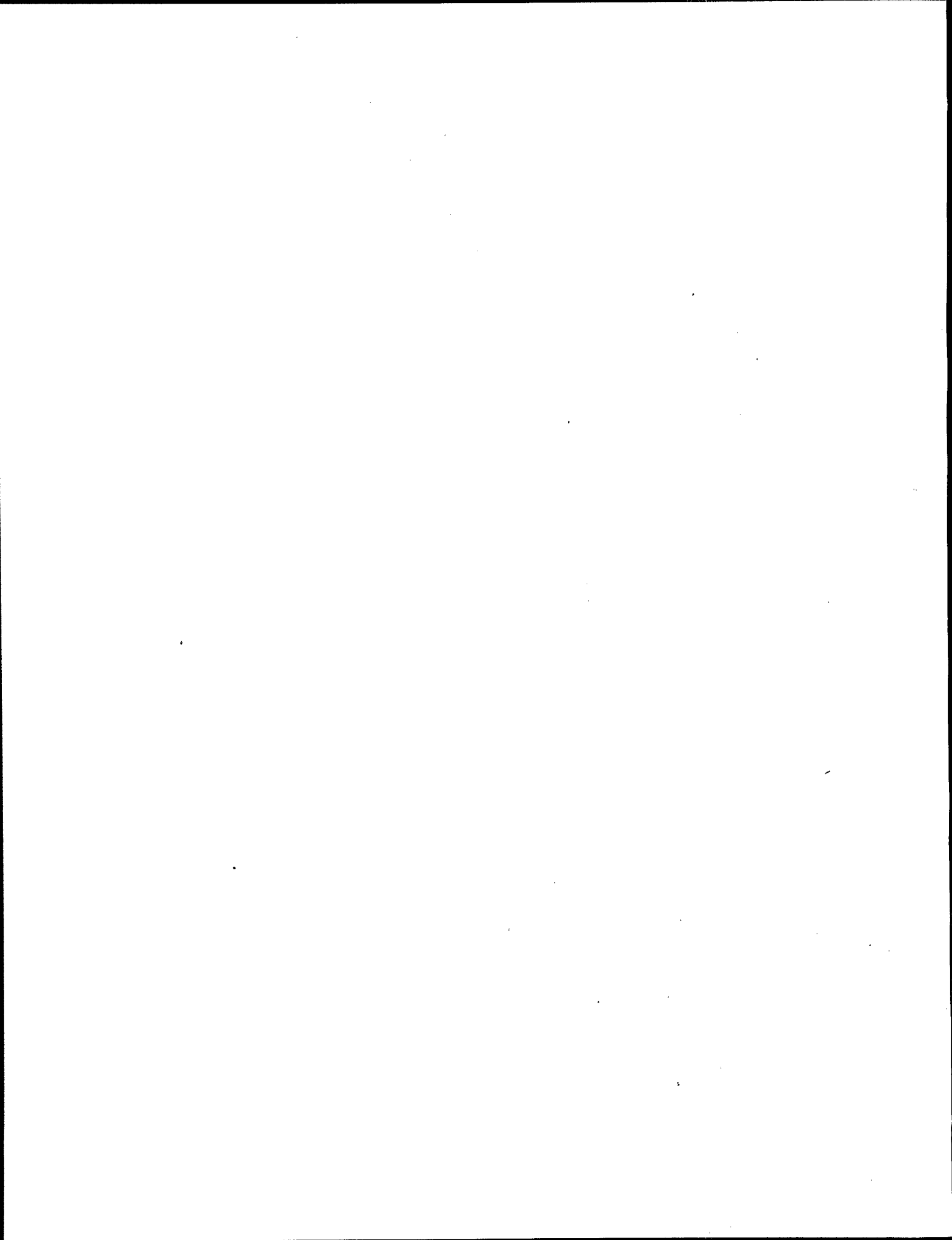
The WPS requires additional restrictions during some pesticide applications in nurseries and greenhouses. This part describes those restrictions.



**Special Application Restrictions in Nurseries .....51**

**Special Application Restrictions in Greenhouses .....53**



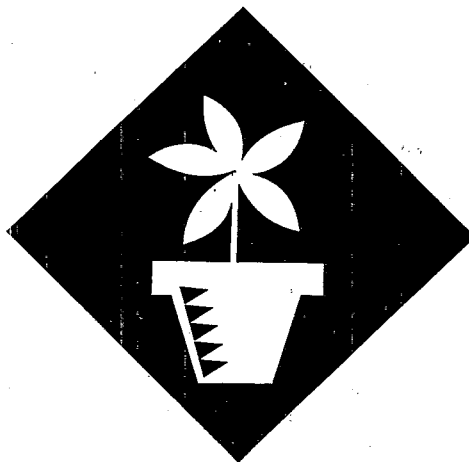




# Special Application Restrictions in Nurseries

## Basic Responsibilities

Worker employers must make sure that, during certain nursery applications, workers and other persons do not enter treated areas on the nursery or, in some circumstances, do not enter areas that are near the treated area.



## Specific Duties

### Application Restrictions on Nurseries

During any application described in column A of Table I, do not allow or direct any person, other than an appropriately trained and equipped handler, to be in the areas on the nursery specified in column B. After the application is finished and during the restricted-entry interval:

- ◆ keep workers out of the treated area (the area to which the pesticide was directed),
- ◆ you may allow workers in the areas just outside the treated area that were off-limits during the application.





**TABLE I**  
**Special Application Restrictions in Nurseries**

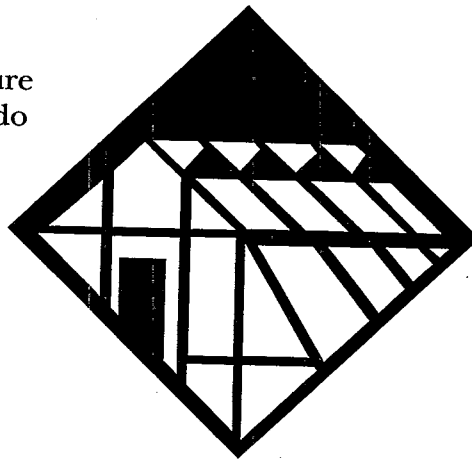
<b>COLUMN A</b> <b>While a Pesticide Is Being Applied:</b>	<b>COLUMN B</b> <b>Workers and Other Persons Are Prohibited in:</b>
<p><b>1. (a) Applied:</b></p> <ul style="list-style-type: none"> <li>◆ Aerially, or</li> <li>◆ In an upward direction, or</li> <li>◆ Using a spray pressure greater than 150 pounds per square inch.</li> </ul> <p><b>OR</b></p> <p><b>(b) Applied as a:</b></p> <ul style="list-style-type: none"> <li>◆ Fumigant, or</li> <li>◆ Smoke, or</li> <li>◆ Mist, or</li> <li>◆ Fog, or</li> <li>◆ Aerosol.</li> </ul>	<p>Pesticide-treated area plus 100 feet in all directions on the nursery</p>
<p><b>2. (a) Applied downward using:</b></p> <ul style="list-style-type: none"> <li>◆ A height of greater than 12 inches from the planting medium; or</li> <li>◆ A fine spray; or</li> <li>◆ A spray pressure greater than 40 pounds per square inch and less than 150 pounds per square inch.</li> </ul> <p><b>OR</b></p> <p><b>(b) Under circumstances other than (1)(a) or (1)(b) or (2)(a) above but for which the pesticide labeling requires the applicator to wear a respirator.</b></p>	<p>Pesticide-treated area plus 25 feet in all directions on the nursery</p>
<p><b>3. In any other manner.</b></p>	<p>Pesticide-treated area</p>



# Special Application Restrictions in Greenhouses

## Basic Responsibilities

Worker employers must make sure that **workers and other persons** do not enter specific areas within the greenhouse during—and, in some instances, after—certain greenhouse applications.



## Specific Duties

### Application Restrictions in Greenhouses

During any application described in column A of Table II, do not allow or direct any person, other than an appropriately trained and equipped handler, to be in the areas specified in column B.

### Ventilation Criteria for Greenhouses

1. After some types of pesticide applications listed in column A of Table II, you must make sure that adequate ventilation has occurred before you allow workers to enter the areas specified in column B. If column C indicates that ventilation restrictions apply, **make sure that one of the following ventilation criteria is met:**
  - ◆ The concentration of the pesticide in the air is measured to be less than or equal to any inhalation exposure level required on the labeling.
  - ◆ If no inhalation exposure level is listed on the labeling, keep workers out until after:
    - ❖ 10 air exchanges, or
    - ❖ 2 hours of ventilation using fans or other mechanical ventilating systems, or
    - ❖ 4 hours of ventilation using vents, windows or other passive ventilation, or
    - ❖ 11 hours with no ventilation followed by 1 hour of mechanical ventilation, or

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- ❖ 11 hours with no ventilation followed by 2 hours of passive ventilation, or
- ❖ 24 hours with no ventilation.

**2. After ventilation criteria are met and until the restricted-entry interval expires:**

- ◆ do not allow workers into the treated area (see Column D on Table II),
- ◆ you may allow workers into the areas just outside the treated area that were off-limits during the application.



**TABLE II ♦ Special Application Restrictions in Greenhouses**

<b>COLUMN A</b> <b>When a Pesticide Is Applied:</b>	<b>COLUMN B</b> <b>Workers and Other Persons Are Prohibited in:</b>	<b>COLUMN C</b> <b>Until:</b>	<b>COLUMN D</b> <b>After the Expiration of Time in COLUMN C Until the Restricted-Entry Interval Expires, the Entry-Restricted Area Is:</b>
<ol style="list-style-type: none"> <li>1. As a fumigant.</li> <li>2. As a <ul style="list-style-type: none"> <li>♦ Smoke, or</li> <li>♦ Mist, or</li> <li>♦ Fog, or</li> <li>♦ Aerosol.</li> </ul> </li> <li>3. Under circumstances (other than in 1 or 2) for which the pesticide labeling requires the applicator to wear a respirator.</li> <li>4. Other than in 1, 2, or 3, but: <ul style="list-style-type: none"> <li>♦ From a height of greater than 12 in. from the planting medium, or</li> <li>♦ As a fine spray, or</li> <li>♦ Using a spray pressure greater than 40 pounds per square inch.</li> </ul> </li> <li>5. In any other manner.</li> </ol>	<p>Entire greenhouse plus any adjacent structure that cannot be sealed off from the treated area.</p> <p>Entire enclosed area.</p> <p>Entire enclosed area.</p> <p>Pesticide-treated area plus 25 feet in all directions within the entire enclosed area.</p> <p>Pesticide-treated area.</p>	<p>The ventilation criteria on the previous pages are met.</p> <p>The ventilation criteria on the previous pages are met.</p> <p>The ventilation criteria on the previous pages are met.</p> <p>Application is complete.</p> <p>Application is complete.</p>	<p>No entry restrictions after criteria in column C are met.</p> <p>Entire enclosed area is the treated area.</p> <p>Pesticide-treated area.</p> <p>Pesticide-treated area.</p> <p>Pesticide-treated area.</p>



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## **PART C**

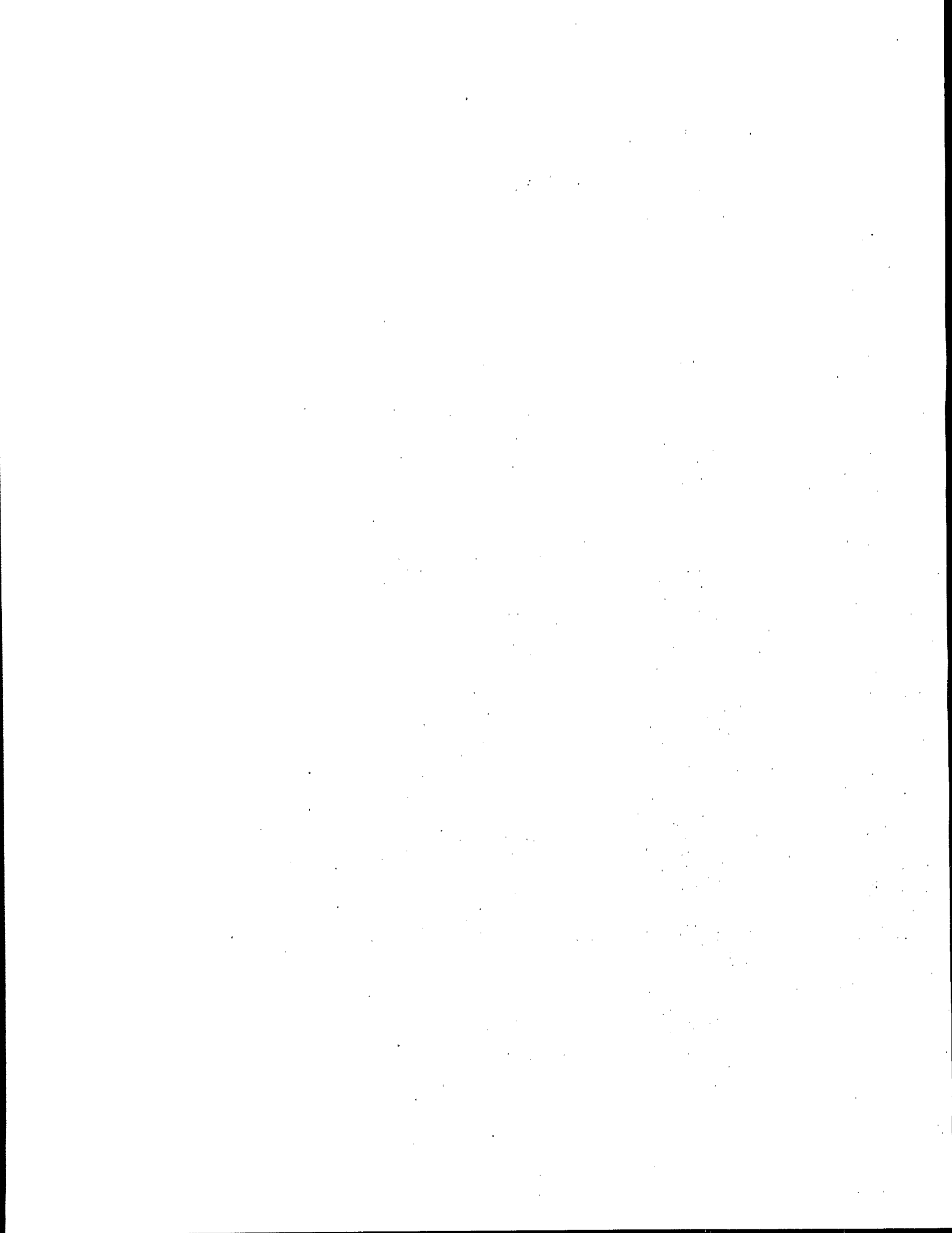
# **Early Entry**

The WPS allows entry into a treated area that remains under a restricted-entry interval only in a few narrow work situations. When early entry is permitted under the WPS, special protections must be given to the early-entry workers. This subsection describes those work situations and protections.



<b>Early-Entry Work Situations .....</b>	<b>59</b>
<b>General Protections for Early-Entry Workers .....</b>	<b>63</b>
<b>Training and Instructions for Early-Entry Workers .....</b>	<b>65</b>
<b>Decontamination Sites for Early-Entry Workers .....</b>	<b>67</b>
<b>Personal Protective Equipment for Early-Entry Workers .....</b>	<b>69</b>





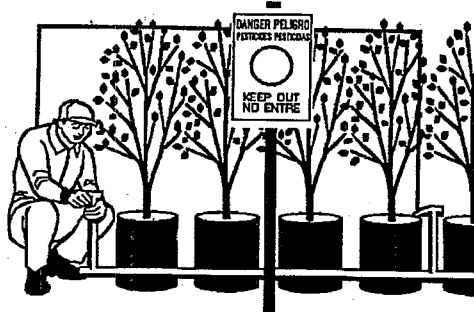


# Early-Entry Work Situations

## Basic Responsibilities

Worker employers must not allow their **workers** to enter treated areas where they will contact treated surfaces, except in a few very limited work situations.

Worker employers must provide special protections to any of their **workers** who do early-entry tasks involving contact with anything that has been treated with a pesticide, including soil, water, air, and surfaces of plants.



## Specific Duties

Early entry involving contact with treated surfaces is permitted in only three work situations:

- ◆ **short-term tasks** that last less than 1 hour and do not involve hand labor,
- ◆ **emergency tasks** that take place because of an agricultural emergency, and
- ◆ **specific tasks** approved by EPA through a formal exception process.

## Short-Term Tasks With No Hand Labor

Workers may enter treated areas before the restricted-entry interval is over to do short-term jobs **that do not involve hand labor**, if provided with the protections and PPE required for early entry. Each worker must:

- ◆ wait at least 4 hours after the pesticide application is completed before entering the treated area, AND
- ◆ wait at least until any inhalation exposure level listed on the product labeling has been reached or any WPS ventilation criteria have been met, AND
- ◆ spend no more than 1 hour in a 24-hour period on short-term early-entry tasks.

Employers should make every effort to schedule pesticide applications and worker tasks in a way that will avoid the necessity of early entry of workers into treated areas.

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For additional protections that must be provided to workers who do short-term early-entry tasks, see pp. 63–70.



For additional  
protections that  
must be provided to  
early-entry workers,  
see pp. 63–70.

### **Hand labor:**

Any agricultural activity performed by hand, or with hand tools, that might cause a worker to have substantial contact with surfaces (such as plants, plant parts, or soil) that may contain pesticide residues. Examples of hand labor tasks include: harvesting, detasseling, thinning, weeding, topping, planting, sucker removal, pruning, disbudding, roguing, and packing produce into containers in the field.

Examples of short-term tasks NOT considered hand labor include: operating, moving, or repairing irrigation or watering equipment not used to apply pesticides.

Only appropriately trained and equipped pesticide handlers may operate, move, or repair the parts of chemigation equipment that may contain pesticide residues.  
(Chemigation equipment is equipment used to apply pesticides with irrigation water.)

### **Tasks During an Agricultural Emergency:**

Early-entry workers may enter treated areas before the restricted-entry interval is over to do tasks that are necessary because of an agricultural emergency, if provided with the protections and PPE required for early entry. Each worker must:

- ◆ do only those tasks relating to mitigating the emergency,  
AND
- ◆ wait at least 4 hours after the pesticide application is  
completed before entering the treated area,  
AND
- ◆ wait at least until any inhalation exposure level listed on the  
product labeling has been reached or any WPS ventilation  
criteria have been met.

#### **1. Declaring a Potential Agricultural Emergency**

A State, Tribal, or Federal agency having jurisdiction must declare that circumstances exist, have occurred, or are forecast that might cause an agricultural emergency where your establishment is located. Such circumstances may include, for example, flooding, hail, high winds, hurricane, tornado, freeze, or frost.

#### **2. Agricultural Emergency on Your Establishment**

Once such an agency has declared that circumstances might cause (or might already have caused) an agricultural emergency in your area, you must decide if an agricultural



emergency actually exists for any treated areas on your establishment that remain under a restricted-entry interval. **All of the following conditions must be met** before you may let workers go into a treated area where a restricted-entry interval is in effect:

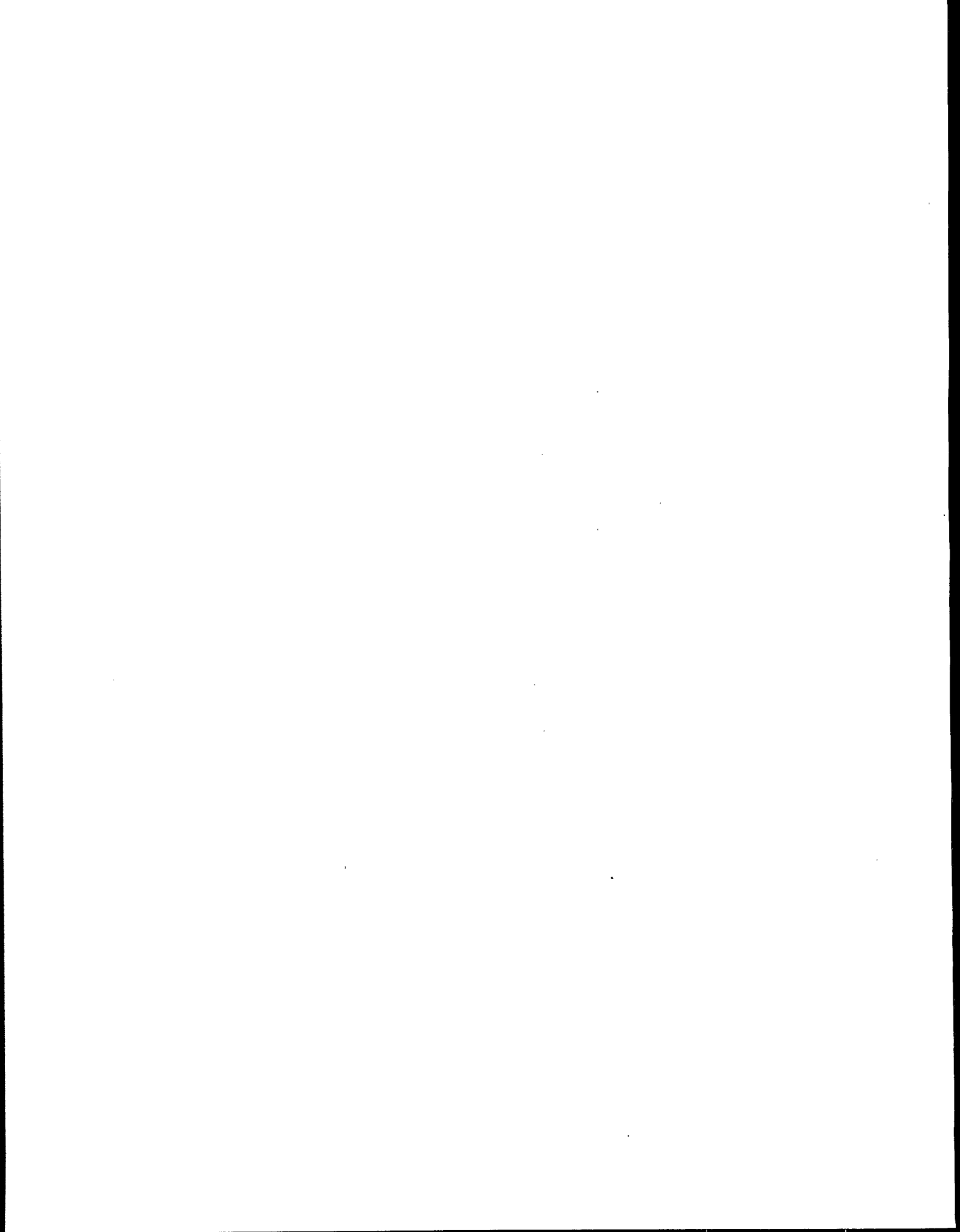
- ◆ You could not have anticipated the circumstances that led to the emergency when you made the pesticide application. For example, you do not qualify if weather forecasts **before** the application warned you that the emergency was imminent.
- ◆ You had no control over the circumstances that led to the emergency. For example, you do not qualify if you forgot to heat your greenhouse or over-watered with an irrigation system.
- ◆ Early entry is the only practice that will prevent or reduce a substantial economic loss involving the crop in that treated area. For example, you do not qualify if you have access to mechanical harvesting equipment that could harvest your crop in lieu of hand-harvesting.
- ◆ If early entry does not occur, the loss of profit will be greater than the loss that would be expected on the basis of experience and the variation in crop yields in previous years. The contribution of mismanagement cannot be considered in determining the loss.

### **EPA-Approved Exceptions**

EPA has established a formal regulatory process for considering additional exceptions to the restrictions on entering treated areas during an REI. If any such exceptions are approved, EPA will publish them in the Federal Register and intends to inform State and Tribal pesticide agencies, the Cooperative Extension Service, affected commodity, industry, and worker associations, and other interested parties. Check with them or the EPA office in your region for an updated list of approved exceptions and for information about the requirements and limitations of those exceptions.

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# General Protections for Early-Entry Workers

## Basic Responsibilities

Worker employers must provide several types of protections, described below, to their **early-entry workers** who contact anything that has been treated with a pesticide, including soil, water, air, and surfaces of plants.



## Specific Duties

### Protections Required by the Pesticide Labeling

Provide any protections required by the pesticide labeling for early-entry tasks.

### Required Protections That Are the Same as for Other Workers

Provide protections that are required for all agricultural workers:

- ◆ Information at a central location (pp. 23–24),
- ◆ Emergency assistance (pp. 35–36),
- ◆ Restrictions during applications (pp. 45, 51–52, 53–55), and
- ◆ Notice about applications (pp. 41–44).

### Special Protections for Early-Entry Workers

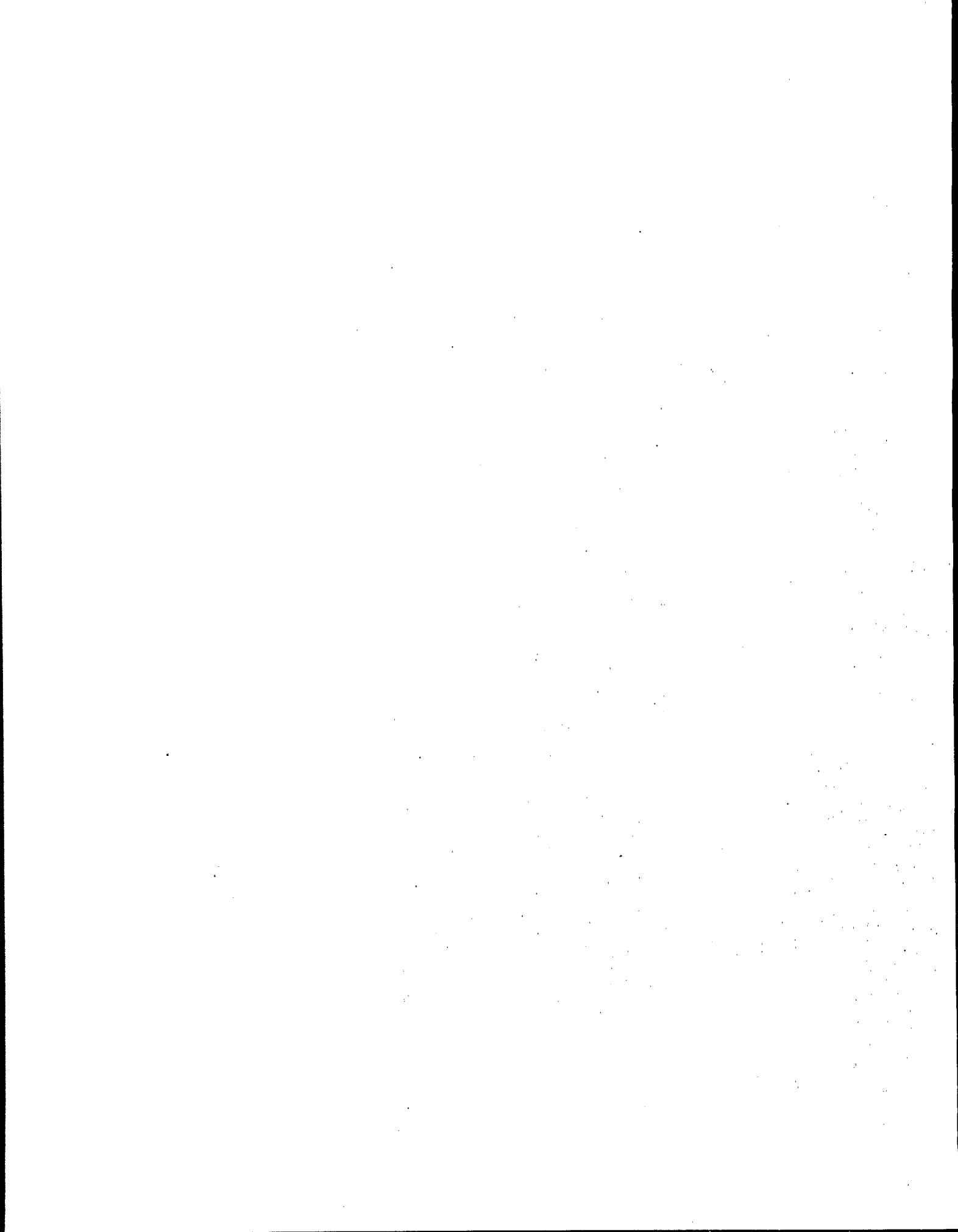
A few WPS requirements for early-entry workers differ from those for other agricultural workers. Provide special protections to early-entry workers in the following areas:

- ◆ Training and instructions,
- ◆ Decontamination sites, and
- ◆ Personal protective equipment.

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**These requirements are described in detail in the next several pages.**







# Training and Instructions for Early-Entry Workers

## Basic Responsibilities

Worker employers must make sure that each of their early-entry workers is currently trained as a WPS worker and, in addition, receives specific information and instructions, described below.



## Specific Duties

### Training

Make sure that each early-entry worker is currently trained as a WPS worker (see requirements on pp. 25–28,103) before entering a treated area on the agricultural establishment during a restricted-entry interval.

The 5-day (or 15-day) grace period for training that applies to other agricultural workers does NOT apply to early-entry workers.

### Instructions Related to Personal Protective Equipment (PPE)

Instruct early-entry workers, in a manner they can understand:

- ◆ how to put on, use, and take off early-entry PPE correctly,
- ◆ about the importance of washing thoroughly after removing PPE, and
- ◆ how to prevent, recognize, and give correct first aid for heat illness (too much heat stress).

### Labeling Information and Instructions

Inform early-entry workers, in a manner they can understand, about the safety information and instructions on the labeling of the pesticide(s) to which the REI applies, including:

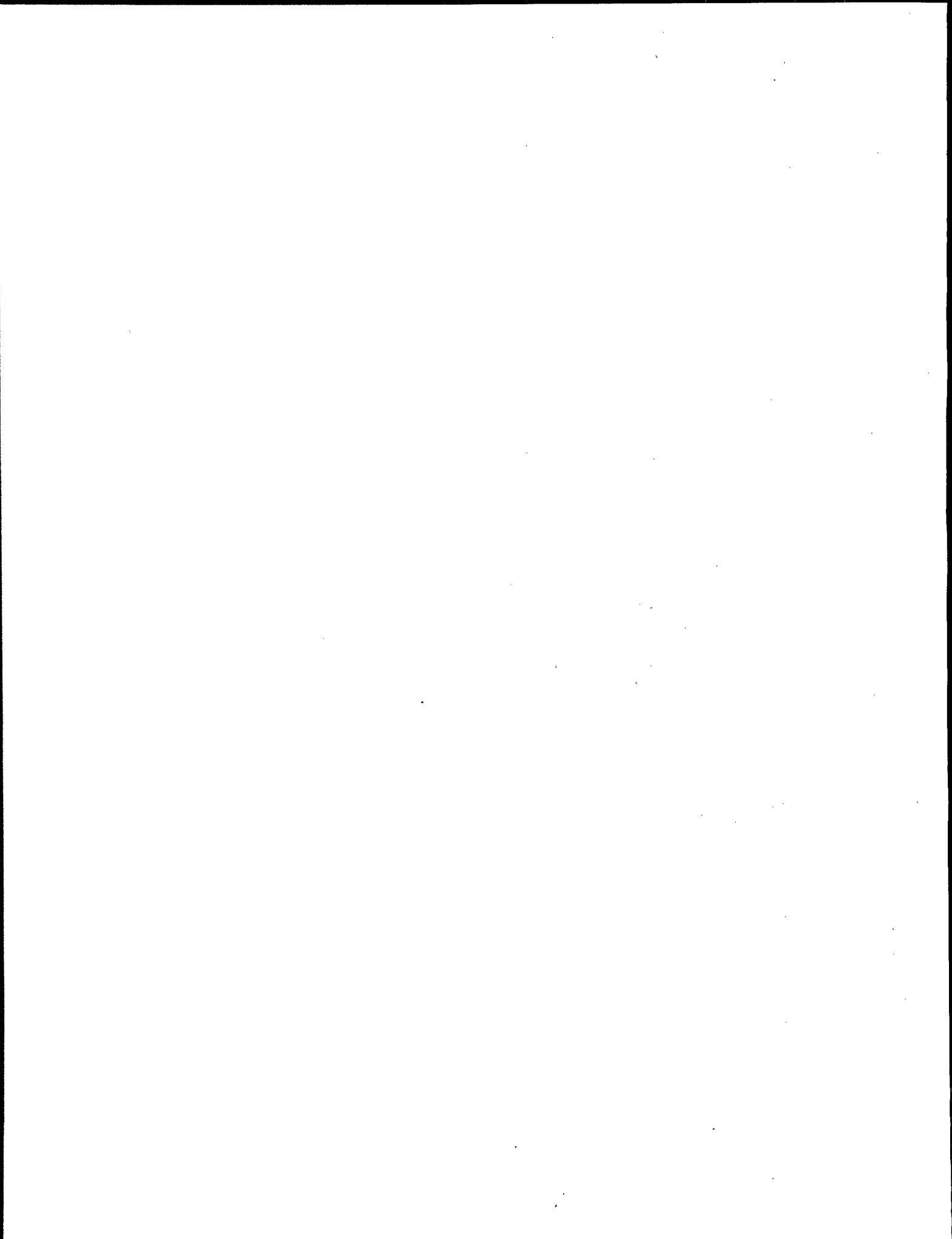
- ◆ human hazard statements and precautions,
- ◆ first aid,
- ◆ signs and symptoms of poisoning,
- ◆ PPE required for early entry, and
- ◆ any other precautions or instructions related to safe use or early entry.

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For definitions of PPE, see pp. 82–83.

Option: You may allow workers who will do early-entry tasks to read the labeling themselves, if they are able to read and understand it.



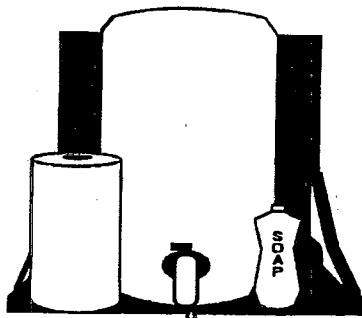




# Decontamination Sites for Early-Entry Workers

## Basic Responsibilities

Worker employers must provide their **early-entry workers** with decontamination sites for washing off pesticides and pesticide residues.



## Specific Duties

### Supplies

Provide each decontamination site with:

**1. Water**—enough for:

- ◆ routine washing, and
- ◆ emergency eyeflushing.

If the water is stored in a tank, the water **must not** be used for mixing pesticides, unless the tank is equipped with correctly functioning antibacksiphoning or check valves or other mechanisms (such as air gaps) that prevent pesticides from moving into the tank.

### How Much Water Should Be Provided?

Obviously, running water meets the requirement. However, if it is not available, use the following guidelines:

- ◆ **Early-Entry Workers:** At least 1 gallon of water is recommended for each early-entry worker using the site. If you find that 1 gallon per early-entry worker is inadequate to last for the entire work period, provide more water or replenish the water at some point during the work period.

**2. Soap and single-use towels**—enough for the needs of early-entry workers.

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◆ Decontamination and emergency eyeflush water must, at all times when it is available to early-entry workers, be of a quality and temperature that will not cause illness or injury when it contacts the skin or eyes or if it is swallowed.



- ◆ **Location**

- ◆ Make sure:

- ◆ 1. The decontamination site is **not** in an area being treated with pesticides.
- ◆ 2. The decontamination site is **not** in an area under a restricted-entry interval, **UNLESS** that location is necessary for the site to be reasonably accessible to early-entry workers.
- ◆ 3. The decontamination site is reasonably accessible to and not more than 1/4 mile from early-entry workers.

- ◆ *Exception:*

- ◆ For tasks performed more than 1/4 mile from the nearest point reachable by vehicle (car, truck, or tractor), the decontamination site may be at the access point. In this circumstance, clean water from springs, streams, lakes, or other sources may be used for decontamination if such water is more readily available than the water at the decontamination site.

- ◆ **Emergency Eyeflushing**

- ◆ Provide each early-entry worker with at least 1 pint of emergency eyeflush water when the pesticide labeling requires protective eyewear for early entry. The emergency eyeflush water must be **immediately accessible**. For example, it could be carried by the handler or be on a vehicle the early-entry worker is using. The emergency eyeflush water may be the water at the decontamination site if the decontamination site is immediately accessible.

- ◆ **Decontamination at the End of Exposure Period**

- ◆ At the site where early-entry workers take off their PPE, provide:
  - ◆ soap,
  - ◆ clean towels, and
  - ◆ enough water to allow early-entry workers to wash thoroughly after removing their PPE.



# Personal Protective Equipment for Early-Entry Workers

## Basic Responsibilities

Worker employers must provide their early-entry workers with the early-entry PPE required by the pesticide labeling, make sure they wear the PPE, and make sure they use the PPE correctly.

## Specific Duties

### Duties Related to Personal Protective Equipment

1. Provide the appropriate PPE in clean and operating condition to each early-entry worker.
2. Make sure early-entry workers wear PPE correctly for its intended purpose and use it according to the manufacturer's instructions.
3. Inspect all PPE before each day of use for leaks, holes, tears, or worn places. Repair or discard any damaged equipment.
4. Provide early-entry workers clean places away from pesticide storage and pesticide use areas to:
  - ◆ store personal clothing not in use,
  - ◆ put on PPE at the start of any exposure period, and
  - ◆ take off PPE at the end of any exposure period.
5. Take necessary steps to prevent heat illness (too much heat stress) while PPE is being worn.
6. Do not allow early-entry workers to wear home or take home PPE contaminated with pesticides.

### Cleaning and Maintaining PPE

1. Keep pesticide-contaminated PPE separate from other clothing or laundry, and wash it separately.
2. If PPE will be reused, clean it before each day of reuse according to the instructions from the PPE manufacturer, unless the pesticide labeling specifies different requirements. If there are no such instructions or requirements, wash the PPE thoroughly in detergent and hot water.

◆ PPE for early-entry activities is listed on the pesticide label in the Directions for Use section under the heading Agricultural Use Requirements.

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◆ See PPE definitions, pp. 82–83.







## UNIT 5

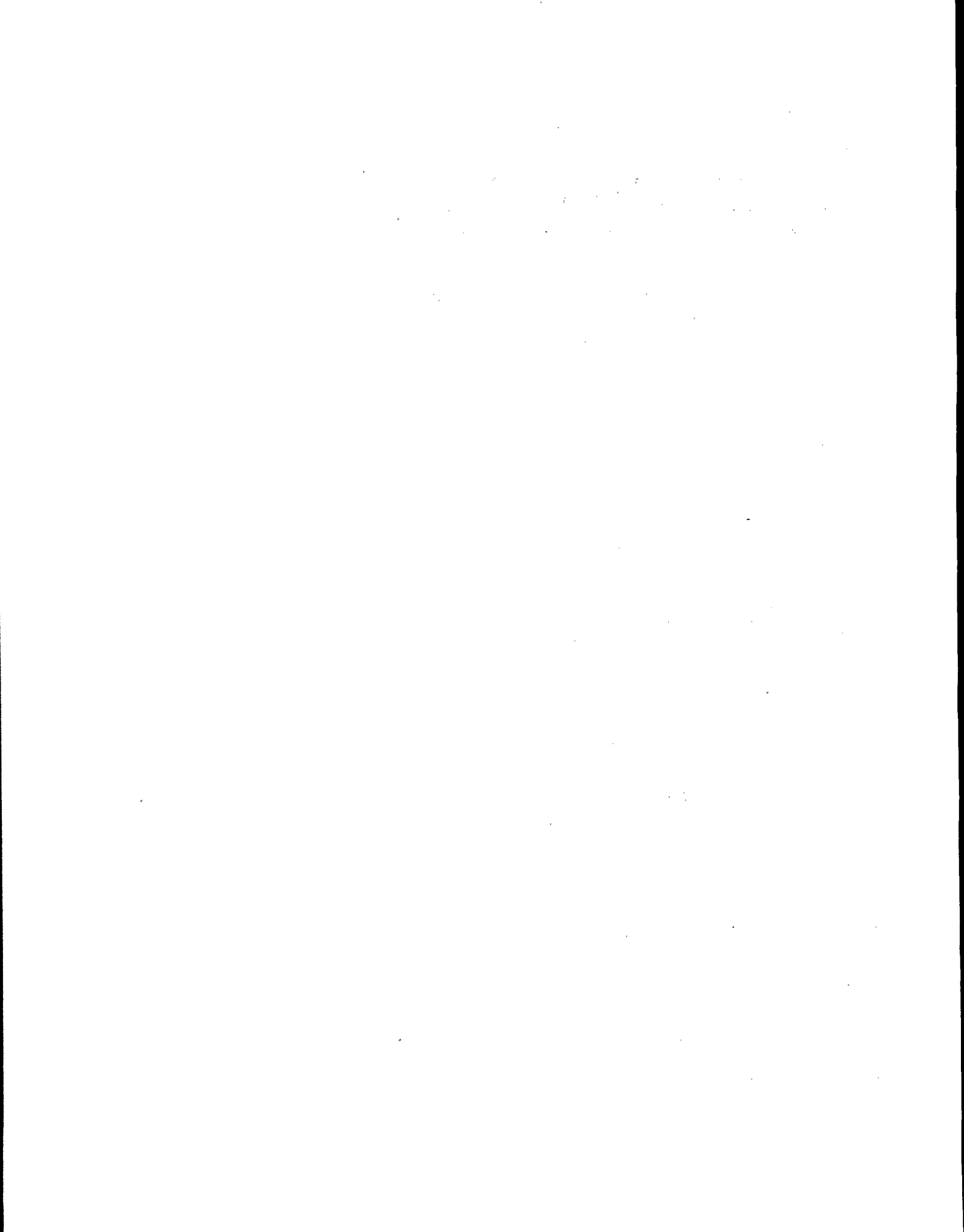
# Further Requirements for Employers of Handlers

Unit 3 described the WPS protections that employers must provide to both worker and handler employees. This unit describes the **additional** WPS protections that employers are required to provide only to their handler employees.



<b>Restrictions During Applications and Monitoring Handlers .....</b>	<b>73</b>
<b>Specific Instructions for Handlers .....</b>	<b>75</b>
<b>Equipment Safety .....</b>	<b>77</b>
<b>Personal Protective Equipment .....</b>	<b>79</b>
<b>Exceptions to PPE Requirements .....</b>	<b>85</b>







# Restrictions During Applications and Monitoring Handlers

## Basic Responsibilities

Handler employers must make sure that:

- ◆ pesticides do not touch **people**, other than appropriately trained and equipped handlers, during pesticide applications, and
- ◆ **pesticide handlers** are monitored, as described below, when handling certain types of pesticides.



**Pesticide handlers** must make sure that pesticides do not touch **people**, other than appropriately trained and equipped handlers, during pesticide applications.

## Specific Duties

### Restrictions During Applications

Both handler employers and pesticide handlers must make sure that each pesticide is applied so that it does not contact, either directly or through drift, anyone except appropriately trained and equipped handlers.

### Monitoring Handlers

#### 1. Pesticides With Skull and Crossbones

At least once every 2 hours, someone must check on—by sight or by voice communication—any handler who is handling a pesticide that has a skull and crossbones symbol on its label. (For monitoring the handling of fumigants in greenhouses, see immediately below.)

#### 2. Fumigants Handled in Greenhouses

Someone must maintain constant visual or voice contact with any handler who is applying or otherwise handling a fumigant in a greenhouse. This includes handlers who enter the greenhouse during fumigation to operate ventilation.

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♦ systems, adjust tarps or other coverings used in the  
♦ fumigation, or check air concentration levels. The person  
♦ monitoring the fumigant handler must:

- ♦ ♦ be trained as a pesticide handler, and
- ♦ ♦ have immediate access to the PPE that the fumigant labeling requires for applicators.

♦ **Fumigant:** Any pesticide product that is a vapor or gas, or  
♦ forms a vapor or gas on application, and whose method of  
♦ pesticidal action is through the gaseous state.

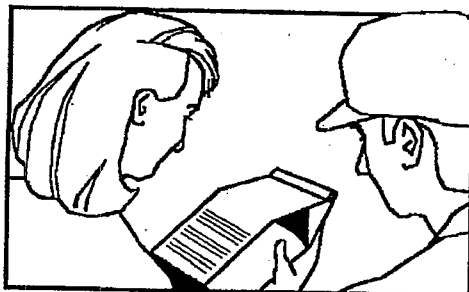


# Specific Instructions for Handlers

## Basic Responsibilities

Handler employers must make sure that, before handlers do any handling task, the handlers:

- ◆ are given information from the pesticide labeling and have access to the labeling itself, and
- ◆ are instructed in the safe operation of the equipment they will be using.



Commercial (custom) handler employers must make sure that, whenever one of their handlers will be doing pesticide handling tasks (including tasks as a crop advisor) on an agricultural establishment, he or she is aware of specific information, described below, concerning pesticide-treated areas on the agricultural establishment.

## Specific Duties

### Labeling Access and Information

1. Inform handlers, in a manner they can understand, about all labeling requirements related to safe use of the pesticide, including at least:
  - ◆ the signal word,
  - ◆ human hazard statements and precautions,
  - ◆ personal protective equipment requirements,
  - ◆ first aid instructions,
  - ◆ environmental precautions, and
  - ◆ any additional precautions about the handling task to be performed.
2. Provide handlers access to the pesticide labeling information during handling tasks.

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Option: You may allow handlers to read the labeling themselves, if they are able to read and understand it.



**Operators of agricultural establishments are required to make sure that commercial handler employers have this information (pp. 33-34).**

- ◆ **Safe Operation of Equipment**

- ◆ Make sure that handlers know how to safely and correctly use all equipment they are assigned to use for handling pesticides, including, if applicable, how to avoid drift and how to use chemigation equipment safely.

- ◆ **Instructions for Commercial Pesticide Handlers**

- ◆ Commercial (custom) pesticide handler employers must make sure that their handler employees are informed about:

- ◆ 1. Specific location and description of any areas on the agricultural establishment:
  - ◆ that may be treated with a pesticide or be under a restricted-entry interval while the commercial handler will be there,
  - ◆ AND
  - ◆ that the commercial handler may be in (or walk within 1/4 mile of).
- ◆ 2. Restrictions on entering those areas. For example, if custom applicators are scheduled to use ground equipment to apply a pesticide on a farm, they need to be informed of any nearby areas on the farm that they should stay out of because the area has an REI in effect. Or if commercial crop advisors are scheduled to scout in an area on a farm that remains under an REI, they need to be told what personal protective equipment they must wear while in that area.



# Equipment Safety

## Basic Responsibilities

Handler employers must make sure that equipment used for mixing, loading, transferring, or applying pesticides (pesticide handling equipment) is inspected and repaired and that persons repairing, cleaning, or adjusting such equipment are protected or informed, as described below.



## Specific Duties

### Equipment Inspection

Inspect pesticide handling equipment before each day of use for leaks, clogging, and worn or damaged parts. Repair or replace any damaged equipment.

### Protections for Persons Maintaining Equipment

Remove pesticide residues from pesticide handling equipment before anyone other than an appropriately trained and equipped handler is allowed to repair, clean, or adjust it.

#### *Exception:*

If it is not feasible to remove pesticide residues from pesticide handling equipment, and the people who will be repairing, cleaning, or adjusting the equipment are not your employees (and, therefore, are not handlers for whom you are responsible under the WPS), you must inform them:

- ◆ that the equipment may be contaminated with pesticides,
- ◆ of the potentially harmful effects of exposure to pesticides, and
- ◆ how to correctly handle such equipment.

For an example of what information to give those who clean and maintain equipment for you, see p. 111.

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# Personal Protective Equipment (PPE)

## Basic Responsibilities

Handler employers must make sure that pesticide handlers:

- ◆ are provided with the PPE the pesticide labeling requires for the task,
- ◆ wear the PPE for the entire handling task, and
- ◆ use the PPE correctly.

Each pesticide handler is responsible for wearing the required personal protective equipment during the entire handling task.

## Specific Duties

### Duties Related to Personal Protective Equipment

Employers must:

1. Provide handlers with the appropriate PPE in clean and operating condition.
2. Make sure the handlers wear the PPE correctly and use it according to the manufacturer's instructions. If a handler wears a respirator, make sure that it fits the wearer correctly.
3. Inspect all PPE before each day of use for leaks, holes, tears, or worn places, and repair or discard any damaged equipment.
4. Provide handlers with clean places away from pesticide storage and pesticide use areas to:
  - ◆ store personal clothing not in use,
  - ◆ put on PPE at the start of any exposure period,
  - ◆ take off PPE at the end of any exposure period.
5. Take any necessary steps to prevent heat illness (too much heat stress) while PPE is being worn.
6. Do not allow any handler to wear home or take home PPE contaminated with pesticides.

- ◆ PPE is coveralls,
- ◆ respirators,
- ◆ protective eyewear,
- ◆ and chemical-resistant suits,
- ◆ gloves, footwear,
- ◆ aprons, and
- ◆ headgear. See
- ◆ definitions,
- ◆ pp. 82-83.

- ◆ In the pesticide
- ◆ labeling, PPE for
- ◆ handling activities is
- ◆ listed in the Hazards
- ◆ to Humans section.

- ◆ Exceptions to PPE:
- ◆ Handler employers
- ◆ may allow handlers
- ◆ to omit some of the
- ◆ PPE listed on the
- ◆ pesticide
- ◆ labeling for
- ◆ a handling
- ◆ activity if
- ◆ the handlers
- ◆ are using a
- ◆ closed system or
- ◆ are working in a
- ◆ cockpit or in an
- ◆ enclosed cab.
- ◆ See pp. 85-87.



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♦ **Cleaning and Maintaining PPE**

♦ Employers must do the following:

- ♦ 1. Keep pesticide-contaminated PPE away from other clothing or laundry, and wash it separately.
- ♦ 2. If PPE will be reused, clean it before each day of reuse according to the instructions from the PPE manufacturer unless the pesticide labeling specifies other requirements. If there are no such instructions or requirements, wash PPE thoroughly in detergent and hot water.
- ♦ 3. Thoroughly dry the clean PPE before it is stored, or put it in a well-ventilated place to dry.
- ♦ 4. Store clean PPE separately from personal clothing and away from pesticide-contaminated areas.

♦ **Replacing Respirator Filters, Cartridges, or Canisters**

♦ Employers must:

- ♦ 1. Replace dust/mist respirator filters:
  - ♦ when breathing resistance becomes excessive,
  - ♦ if the filter is damaged or torn,
  - ♦ whenever the respirator manufacturer or pesticide labeling says to replace them (if the instructions differ, change the filter at the shorter interval),
  - ♦ at the end of each day's work period, if no other instructions or indications of service life are available.
- ♦ 2. Replace gas- and vapor-removing respirator cartridges or canisters:
  - ♦ at the first indication of odor, taste, or irritation,
  - ♦ when the respirator manufacturer or pesticide labeling says to replace them (if instructions differ, change the cartridge or canisters at the shorter interval),
  - ♦ at the end of each day's work period, if no other instruction or indications of service life are available.

♦ **Disposal of PPE**

♦ Employers must:

- ♦ 1. Discard coveralls or other absorbent materials that have been drenched or heavily contaminated with an undiluted pesticide that has the signal word DANGER or WARNING on the labeling. They must not be reused.



2. Comply with any applicable Federal, State, Tribal, and local regulations when disposing of PPE that cannot be cleaned correctly.

### **Instructions for Persons Who Clean PPE**

Employers must inform people who clean or launder PPE:

- ◆ that the PPE may be contaminated with pesticides,
- ◆ of the potentially harmful effects of exposure to pesticides,
- ◆ how to protect themselves when handling contaminated PPE, and
- ◆ how to clean PPE correctly.

For an example of what to tell people who clean PPE, see pp. 109–110.





## Personal Protective Equipment (PPE) Definitions

**Personal protective equipment:** Apparel and devices worn to protect the body from contact with pesticides or pesticide residues, including:

- ◆ coveralls,
- ◆ chemical-resistant suits, gloves, footwear, aprons, and headgear,
- ◆ protective eyewear, and
- ◆ respirators.

While the following attire is not defined as PPE, the labeling may require pesticide handlers or early-entry workers to wear it for some tasks:

- ◆ long- and short-sleeved shirts,
- ◆ long and short pants,
- ◆ shoes and socks,
- ◆ other items of regular work clothing.

If such non-PPE attire is required, the employer must make sure that it is worn.

**Chemical-resistant:** Allows no measurable amount of the pesticide being used to move through the material during use.

**Waterproof:** Allows no measurable movement of water (or water-based solutions) through the material during use.

**Chemical-resistant suit:** A loose-fitting, one- or two-piece, chemical-resistant garment that covers, at a minimum, the entire body except head, hands, and feet.

**Coverall:** A loose-fitting one- or two-piece garment that covers, at a minimum, the entire body except head, hands, and feet. Coveralls are made of fabric such as cotton or a cotton-polyester blend, and are not chemical-resistant. The pesticide labeling may specify that the coveralls be worn over a layer of clothing. *Substitution:* A chemical-resistant suit may be worn instead of coveralls and any required inner layer of clothing.

**Chemical-resistant apron:** An apron that is made of chemical-resistant material and that covers the front of the body from mid-chest to the knees. *Substitution:* If a chemical-resistant suit is worn, no apron is required.



## **PPE Definitions, continued**

**Gloves:** Hand coverings that are the type listed on the pesticide label. Gloves or glove linings made of leather, cotton, or other absorbent materials **must not be worn** for handling or early-entry activities unless these materials are listed on the pesticide labeling as acceptable for such use.

*Substitution:* Leather gloves may be worn over chemical-resistant liners, if chemical-resistant gloves with sufficient durability and suppleness are not obtainable for tasks with roses or other plants with sharp thorns. However, after leather gloves have been worn for protection from pesticide exposure, they may only be worn with chemical-resistant liners and may not be worn for any other use.

**Chemical-resistant footwear:** Chemical-resistant shoes; chemical-resistant boots; or chemical-resistant shoe coverings worn over shoes or boots. *Substitution:* Leather boots may be worn in rough terrain, if chemical-resistant footwear with sufficient durability and a tread appropriate for wear in such terrain is not obtainable.

**Protective eyewear:** Goggles, a face shield, or safety glasses with front, brow, and temple protection.

*Substitution:* A full-face respirator may be worn instead of protective eyewear.

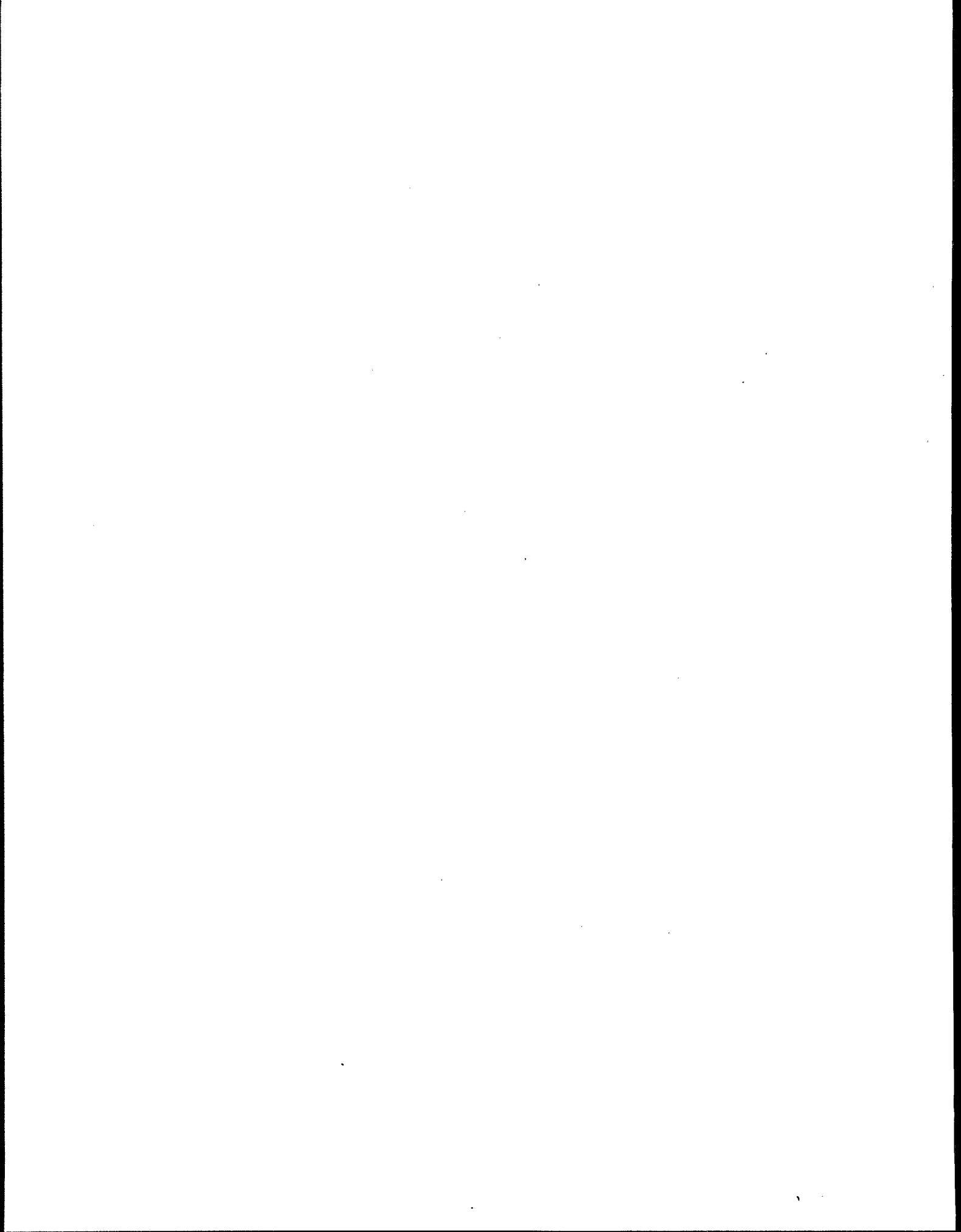
**Chemical-resistant headgear:** A chemical-resistant hood or a chemical-resistant hat with a wide brim.

**Respirator:** A device that protects the respiratory system. It must be the type listed on the pesticide label (or one that is more protective) and must be appropriate for the pesticide product being used and for the activity being performed.

*Substitutions:* A respirator with a canister approved for pesticides or with an organic-vapor cartridge equipped with a pesticide prefilter may be worn instead of a dust/mist filtering respirator.

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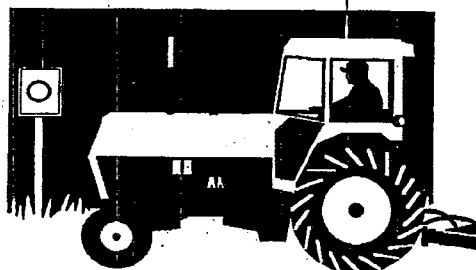


# Exceptions to PPE Requirements

## Basic Responsibilities

Handler employers may allow handlers to omit some of the PPE listed on the pesticide labeling for a handling task if the handlers are:

- ◆ using a closed system, or
- ◆ in an enclosed cab, or
- ◆ in a cockpit.



◆ These exceptions to PPE are allowed unless expressly prohibited by product labeling.

## Specific Duties

### Closed Systems

Closed systems are systems designed by the manufacturer to enclose the pesticide to prevent it from contacting handlers or other people while it is being handled. Such systems must function properly and be used and maintained in accordance with the manufacturer's written operating instructions.

1. When using a closed system to mix or load pesticides with the signal word DANGER or WARNING, handlers need not wear all the PPE listed on the pesticide labeling, but must wear at least:

- ◆ long-sleeved shirt and long pants,
- ◆ shoes and socks,
- ◆ a chemical-resistant apron, and
- ◆ protective gloves specified on the pesticide labeling for mixing, loading, and other handling tasks.

2. When using a closed system to mix or load pesticides with the signal word CAUTION, handlers need not wear all the PPE listed on the pesticide labeling, but must wear at least:

- ◆ long-sleeved shirt and long pants, and
- ◆ shoes and socks.

◆ Even when reduced PPE is permitted to be worn during a task, handlers must be provided all PPE required by the pesticide labeling for that task and have it immediately available for use in an emergency.

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- ♦ 3. When using a closed system to do handling tasks other than mixing and loading with ANY pesticide, handlers need not wear all of the PPE listed on the pesticide labeling, but must wear at least:
  - ♦ long-sleeved shirt and long pants, and
  - ♦ shoes and socks.

Such closed systems might include closed application systems designed to incorporate pesticides into soil, but only if the system does not allow any pesticide contact with the air throughout the entire application process.
- ♦ 4. When using a closed system that operates under pressure, handlers may wear the reduced PPE specified above, but must **add** protective eyewear.

#### ♦ **Enclosed Cabs**

- ♦ **Enclosed cabs** must have a nonporous barrier that totally surrounds the occupants and prevents contact with pesticides outside of the cab.
- ♦ **Enclosed cabs that provide respiratory protection** must have a properly functioning ventilation system that is used and maintained according to the manufacturer's written operating instructions. The cab must be declared in writing by the manufacturer or by a governmental agency to provide at least as much respiratory protection as the type of respirator listed on the pesticide labeling.
- ♦ *Examples:*
  - ♦ Some enclosed-cab systems provide respiratory protection equivalent to a dust/mist filtering respirator and could, therefore, be used as a substitute when that type of respirator is specified on the product labeling. Other enclosed-cab systems are equipped to remove organic vapors as well as dusts and mists and could be used as a substitute when either the dust/mist filtering respirator or an organic-vapor-removing respirator is specified on the product labeling.
- ♦ 1. **Enclosed cabs that do not provide respiratory protection**—In an enclosed cab that does not provide respiratory protection, handlers need not wear all the PPE listed on the pesticide labeling, but must wear at least:
  - ♦ long-sleeved shirt and long pants,
  - ♦ shoes and socks, and
  - ♦ any respirator required for the handling task.



**2. Enclosed cabs that provide respiratory protection—**In an enclosed cab that provides respiratory protection equal to the labeling-required respirator, handlers need not wear all the PPE listed on the pesticide labeling, but must wear at least:

- ◆ long-sleeved shirt and long pants, and
- ◆ shoes and socks.

**3. In any enclosed cab where reduced PPE is worn—**Handlers must:

- ◆ keep immediately available all PPE listed on the labeling for the type of task being performed,
- ◆ wear the PPE if it is necessary to leave the cab and contact pesticide-treated surfaces in the treated area,
- ◆ take off PPE that was worn in the treated area before reentering the cab, and
- ◆ store all PPE in a chemical-resistant container, such as a plastic bag, to prevent contamination of the inside of the cab.

## **Cockpits**

**1. Gloves when entering or leaving an aircraft—**Handlers must:

- ◆ wear chemical-resistant gloves when entering or leaving an aircraft contaminated by pesticide residues, and
- ◆ store used gloves in a closed, chemical-resistant container, such as a plastic bag, to prevent contamination of the inside of the cockpit.

**2. Open cockpits—**In an open cockpit, handlers must wear any gloves, respirator, and body protection listed on the pesticide labeling for application tasks. However, they may wear:

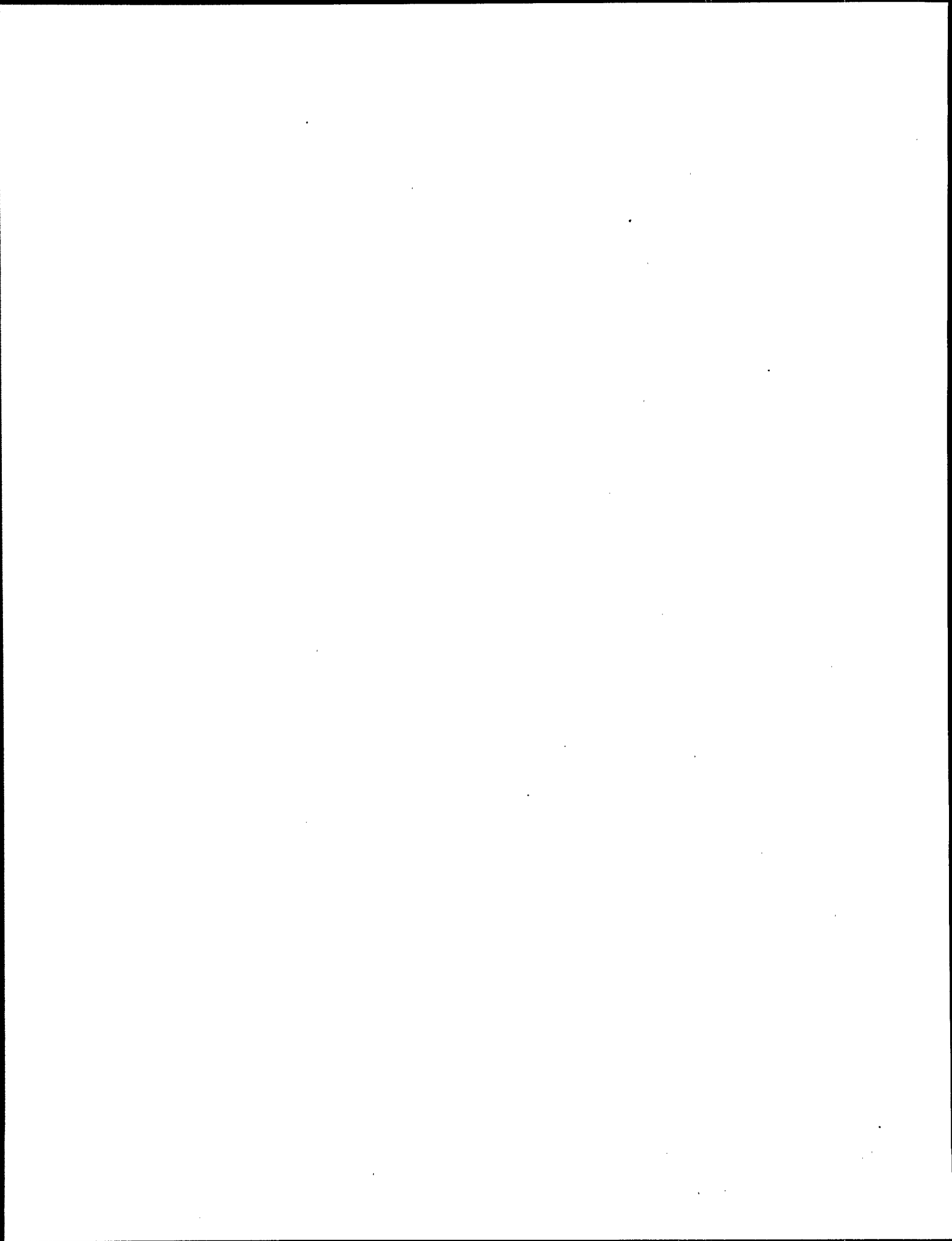
- ◆ shoes and socks instead of chemical-resistant footwear,
- ◆ a helmet instead of a chemical-resistant hat or hood, and
- ◆ a visor instead of protective eyewear.

**3. Enclosed cockpits—**In an enclosed cockpit, handlers need not wear all the PPE listed on the pesticide labeling, but must wear at least:

- ◆ long-sleeved shirt and long pants, and
- ◆ shoes and socks.









## UNIT 6

# Owner Exemptions and Crop Advisors

The WPS exempts owners of agricultural establishments from many WPS requirements, and it contains specific protections for crop advisors. This unit describes these owner exemptions and crop advisor provisions.

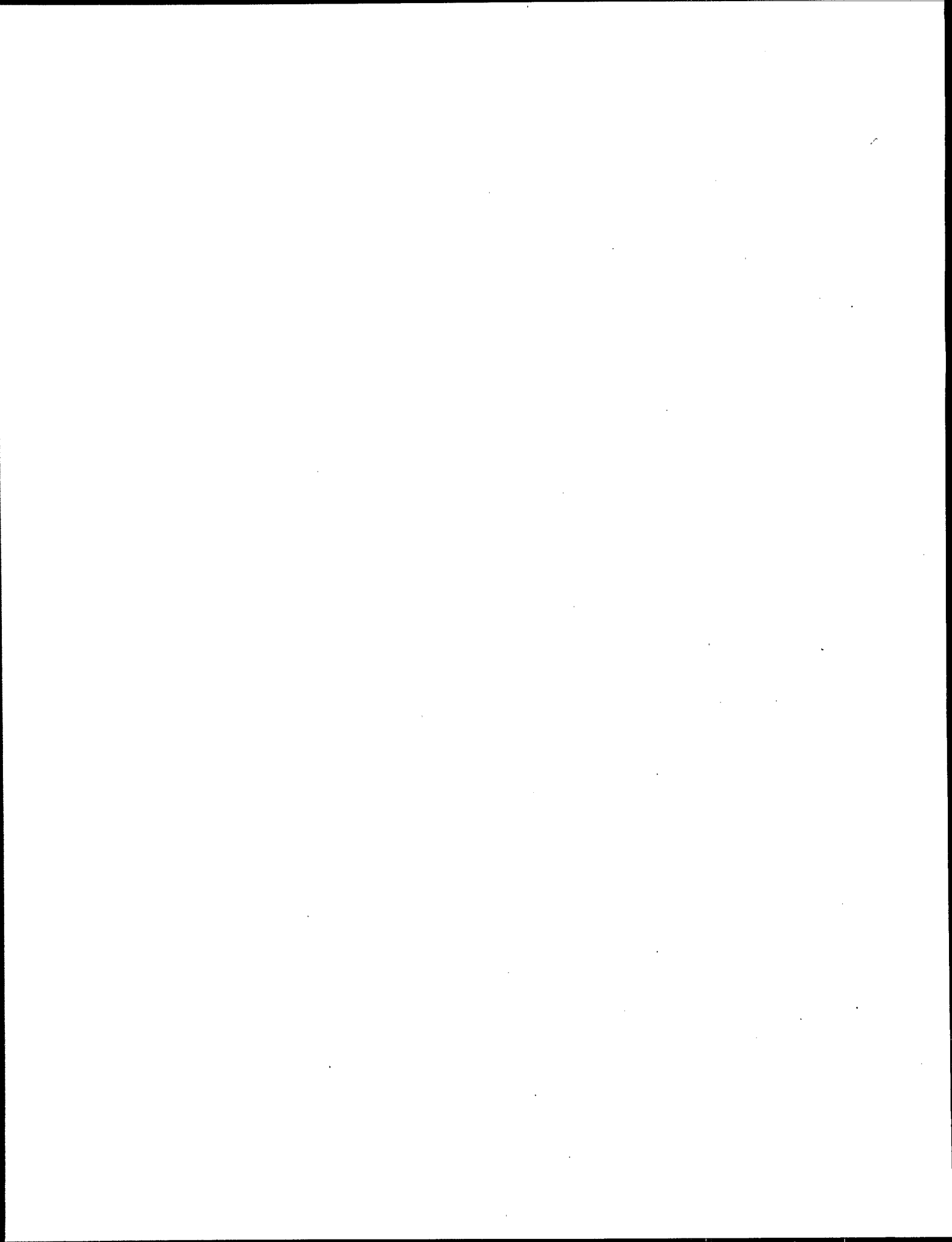


**Agricultural Owner Exemptions .....91**

**Protections for Crop Advisors .....95**

**6**







# Agricultural Owner Exemptions

Owners of agricultural establishments and members of their immediate family are exempt from many WPS requirements. However, EPA encourages owners to provide themselves and their families with all WPS protections.



♦ Immediate family  
♦ includes only  
♦ spouse, children,  
♦ stepchildren, foster  
♦ children, parents,  
♦ stepparents, foster  
♦ parents, brothers,  
♦ and sisters.

**Owner:** Any person who has a present possessory interest (fee, leasehold, rental, or other) in an agricultural establishment covered by the WPS. A person who has both leased such agricultural establishment to another person and granted that same person the right and full authority to manage and govern the use of such agricultural establishment is NOT an owner under the WPS.

**Examples:**

You do not qualify for the agricultural owner exemptions if:

1. you have rented out or leased out your farm, forest, nursery, or greenhouse to another person AND you have no part in the management or profit/loss from it. The person to whom you have rented or leased your property is the "owner" for the purposes of the WPS.
2. you are hired to operate a farm, forest, nursery, or greenhouse, but the person who owns the property makes some of the decisions as to the management of it or shares in the profit/loss from it.

The WPS does NOT allow any exemptions for owners of commercial pesticide handling establishments or for persons who operate or manage, but do not own, an agricultural establishment.

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- ♦ Agricultural owners must provide all protections required by the
- ♦ WPS to persons who are NOT members of their immediate family.
- ♦ These persons include:
  - ♦ workers or handlers who are their employees, and
  - ♦ persons who clean PPE or repair, clean, or maintain contaminated pesticide handling equipment.

### ♦ **Requirements Agricultural Owners Must Comply With**

- ♦ The following requirements and provisions DO apply to owners of
- ♦ agricultural establishments and to members of their immediate
- ♦ family:

- ♦ 1. Employer information exchange. (pp. 33–34)
- ♦ 2. Restrictions during handling tasks:
  - ♦ Use the personal protective equipment and other work attire listed on the pesticide labeling for the task being performed. (pp. 82–83)
  - ♦ Exceptions to personal protective equipment. (pp. 85–87)
- ♦ 3. Restrictions during applications:
  - ♦ Make sure that each pesticide is applied so that it does not contact, either directly or through drift, anyone (including you and members of your immediate family), except appropriately trained and equipped handlers. (p. 73)
  - ♦ Make sure that you, your family members, and all other persons, except correctly trained and equipped handlers, are kept out of areas being treated with pesticides. (p. 45)
  - ♦ Make sure that you, your family members, and all other persons, except correctly trained and equipped handlers, are kept out of areas immediately around the area being treated during certain pesticide applications in nurseries and greenhouses. (pp. 51–55)
- ♦ 4. Restrictions during restricted-entry intervals (pp. 45–46):
  - ♦ When two (or more) pesticides are applied at the same time, and have different REI's, make sure that you and your family members follow the longer restricted-entry interval. (p. 46)
  - ♦ No-contact early entry. (pp. 46–47)
  - ♦ Short-term, agricultural emergency, or specially excepted early entry (see explanation below). (pp. 59–61)



If agricultural owners or members of their immediate family enter a treated area and contact treated surfaces during a restricted-entry interval, they must:

- ◆ Wait at least 4 hours after the pesticide application is completed before entering the treated area, AND
- ◆ Wait at least until any inhalation exposure level listed on the product labeling has been reached or any WPS ventilation criteria have been met, AND
- ◆ Obey the time limitation of 1 hour in 24 hours, if short-term (non-hand-labor) early-entry tasks are being performed, AND
- ◆ Wear the personal protective equipment specified on the pesticide labeling for early-entry tasks, AND
- ◆ Follow any other restrictions specified in any special exception under which the early entry takes place, AND
- ◆ Follow any other restrictions specified in the pesticide labeling for early entry.

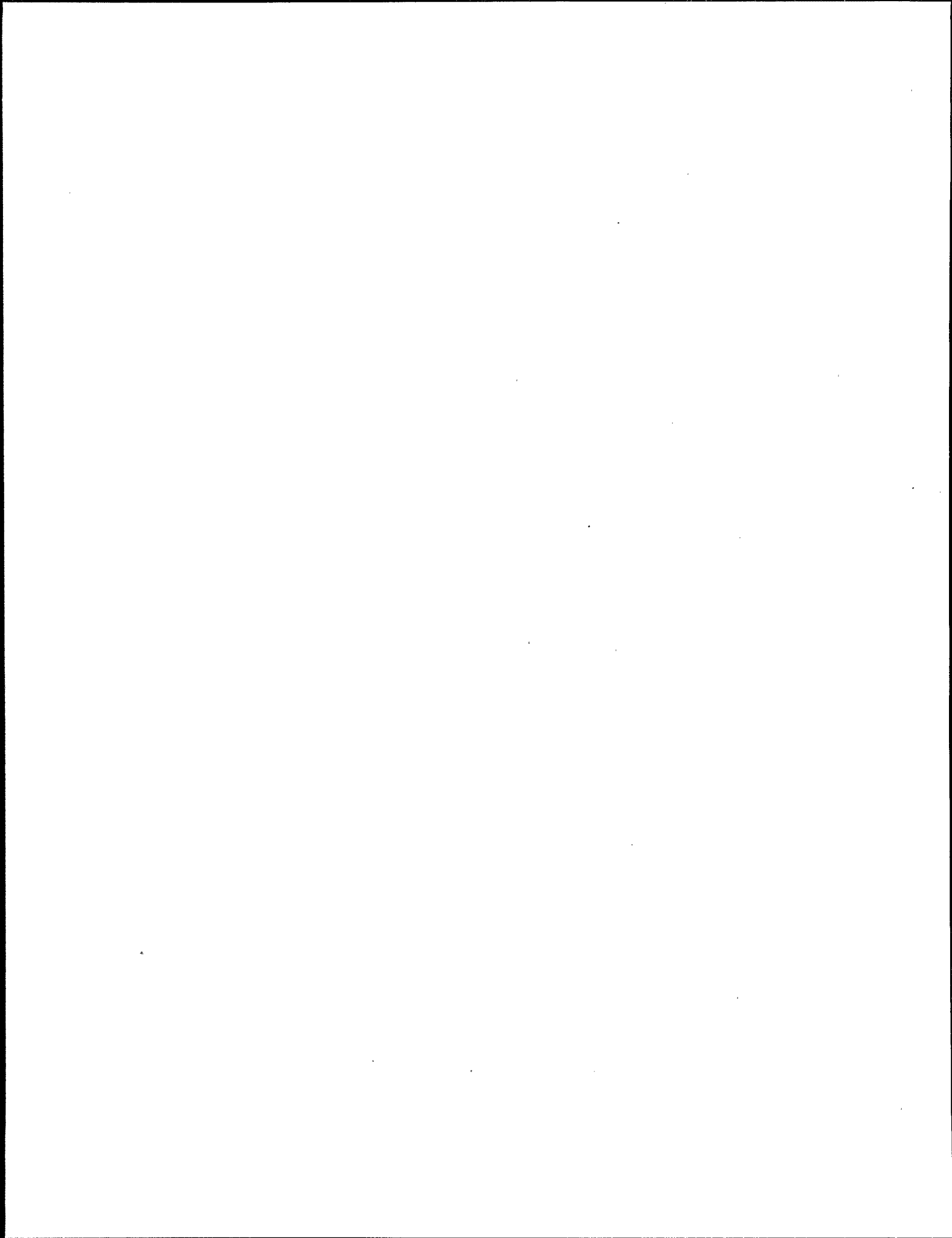
## Exemptions for Agricultural Owners

Agricultural owners are NOT required to provide themselves or members of their immediate family with the following protections of the WPS:

1. Information at a central location (pp. 23–24)
2. Pesticide safety training (pp. 25–28)
3. Decontamination sites (pp. 29–31)
4. Emergency assistance (pp. 35–36)
5. Notice about applications (pp. 41–44)
6. Monitoring handlers (pp. 73–74)
7. Specific handling instructions (pp. 75–76)
8. Equipment safety (p. 77)
9. All the specific duties related to the care of PPE and management of its use. (pp. 79–81)
10. The following duties related to early entry (pp. 65–70):
  - ◆ Training and instructions,
  - ◆ Decontamination sites,
  - ◆ Specific duties related to the care of PPE and management of its use.





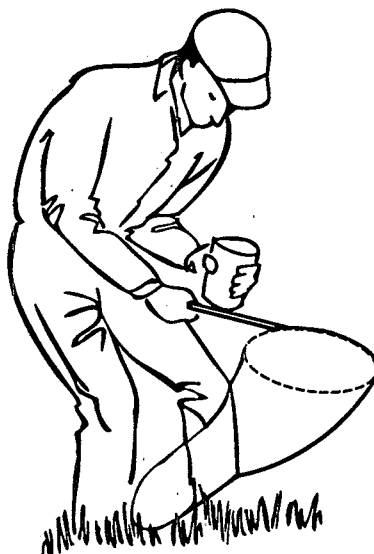




# Protections for Crop Advisors

## Basic Responsibilities

The WPS requires employers to provide certain protections to their employees who are working as crop advisors.



**Crop advisor:** Any person who is assessing pest numbers or damage, pesticide distribution, or the status, condition, or requirements of agricultural plants. The term does NOT include any person who is performing hand labor tasks, such as weeding, planting, cultivating, or harvesting. Examples of crop advisors are crop consultants, scouts, and integrated pest management monitors.

**Independent or commercial crop advisor:** Any person who is working as a crop advisor and is employed (including self-employed) by anyone other than the agricultural establishment on which the work is being done.

## Specific Duties

### Required Protections During or Soon After a Pesticide Application

#### 1. Same Protections as Pesticide Handlers

Employers must provide their crop advisors with the WPS protections required for **pesticide handlers** IF the crop advisor enters an area on an agricultural establishment:

- ◆ while a pesticide is being applied,
- ◆ before any inhalation exposure level listed in the pesticide labeling has been reached or before one of the ventilation criteria in the WPS or in the pesticide labeling has been reached,
- ◆ while a restricted-entry interval is in effect.

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## 2. No Time Limits

Crop advisors may enter an area during a pesticide application or during a restricted-entry interval as long as they are trained as pesticide handlers, are given other pesticide-handler protections (listed below), and are wearing the appropriate personal protective equipment. The restrictions on entry, such as waiting for 4 hours after application is completed or limiting the time spent in the entry-restricted area to 1 hour (or any other time period), DO NOT APPLY to crop advisors.

## 3. Required Protections

- ◆ Information at a central location (pp. 23–24)

### *Exception:*

Employers of independent (commercial) crop advisors do NOT have to provide their crop advisors with information at a central location.

- ◆ Pesticide safety training for handlers (pp. 25–28)
- ◆ Decontamination sites (pp. 29–31)
- ◆ Emergency assistance (pp. 35–36)
- ◆ Monitoring handlers (pp. 73–74)

### *Exception:*

Crop advisors entering a treated area during a restricted-entry interval need NOT be monitored.

- ◆ Special instructions for handlers (pp. 75–76)
- ◆ Duties related to PPE (pp. 79–83)

## 4. Personal Protective Equipment During REI's

**Early-Entry PPE for Early Entry “With Contact”:** Crop advisors who enter a treated area during a restricted-entry interval, and whose crop advisor activities involve contact with anything that has been treated with a pesticide, including soil, water, and surfaces of plants, may wear the PPE listed on the pesticide labeling for **early-entry tasks** (instead of the PPE listed for handling tasks), if:

- ◆ Application has been completed for at least 4 hours, and
- ◆ Any inhalation exposure level listed in the labeling has been reached or any ventilation requirements established by the WPS or pesticide labeling have been met.

**No PPE for “No Contact” Early Entry:** Crop advisors who enter a treated area during a restricted-entry interval and whose crop advisor activities do NOT involve contact with



anything that has been treated with the pesticide to which the restricted-entry interval applies are not required to wear personal protective equipment.

## **Required Protections After the REI**

### **1. Independent (Commercial) Crop Advisors**

When independent (commercial) crop advisors enter any area on an agricultural establishment where no application is underway and no restricted-entry interval is in effect, their employers need NOT provide them with any WPS protections.

### **2. Employees of the Agricultural Establishment**

When crop advisors who are employees of the farm, forest, nursery, or greenhouse enter any area on the agricultural establishment where no application is underway and no restricted-entry interval is in effect, their employer must provide them with the WPS protections required for **agricultural workers**. For specific information about each of these protections, see the pages referenced below. The protections include:

- ◆ Information at a central location (pp. 23–24)

Certain information (pesticide safety poster, application list, location of emergency facility) must be displayed at a central location whenever (1) the crop advisor is on the agricultural establishment, and (2) a pesticide has recently been applied.

- ◆ Pesticide safety training for workers (pp. 25–28)

Crop advisors must be trained about general pesticide safety before they accumulate 5 days (15 days until October 20, 1997) of entry into treated areas on the establishment where, within the past 30 days, a pesticide has been applied or a restricted-entry interval has been in effect.

- ◆ Decontamination sites (pp. 29–31)

A decontamination site for washing off pesticide residues must be provided to any crop advisor who is working in an area where a pesticide has recently been applied and who is doing tasks that involve contact with anything that has been treated with the pesticide, including soil, water, or surfaces of plants.

6



**Crop advisors may enter treated areas during an application or during a restricted-entry interval if they receive handler-type protections.**

◆ **Emergency assistance (pp. 35–36)**

Emergency assistance must be provided to the crop advisor if there is reason to believe that the employee has been poisoned or injured by a pesticide used on the agricultural establishment—for example, through application, spills, splashes, drift, or contact with pesticide residues.

◆ **Notice about applications (pp. 41–44)**

With a few exceptions, the crop advisor must be notified about areas on the agricultural establishment where pesticide applications are taking place or where restricted-entry intervals are in effect.

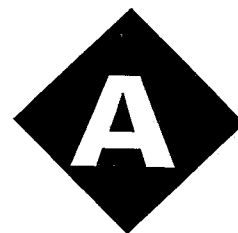
◆ **Restrictions during and after applications (pp. 45–46, 51–52, 53–55)**

The crop advisor must be protected during pesticide applications and during restricted-entry intervals on the agricultural establishment.



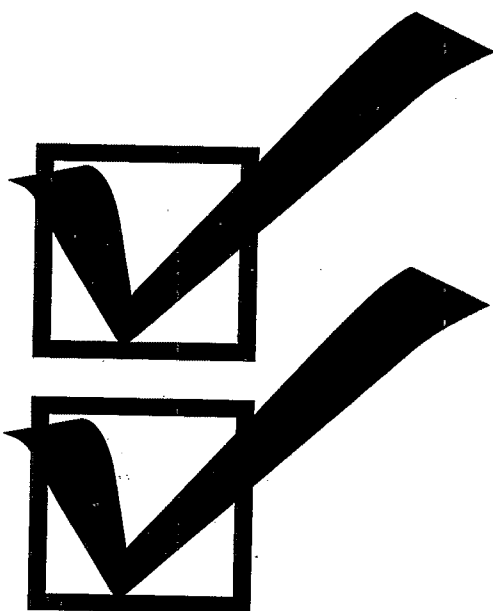
## APPENDIX A

# Criteria for WPS Materials



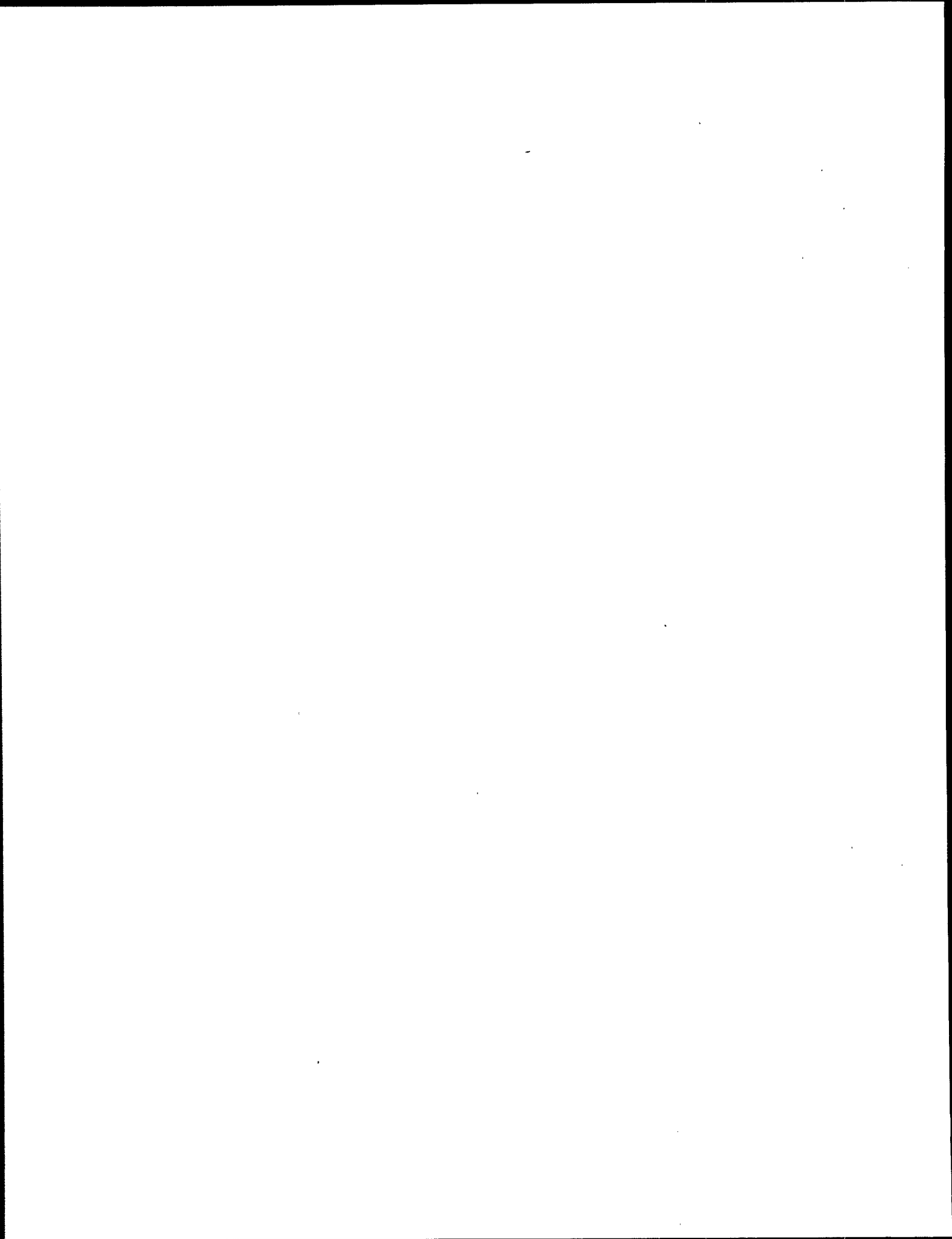
The WPS contains specific criteria for the design of the sign required for treated-area posting and for the content of the safety poster, worker training materials, and handler training materials. This appendix lists those criteria.

EPA is developing a safety poster, warning sign, and worker and handler training programs to meet the requirements of the WPS. You may use these materials, or you may use alternative materials that meet the criteria listed in this appendix.



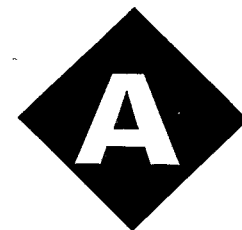
Criteria for Pesticide Safety Poster .....	101
Requirements for Warning Signs .....	102
Criteria for Worker Training .....	103
Criteria for Handler Training .....	104







# Criteria for Pesticide Safety Poster



Each WPS safety poster must convey to workers and handlers:

1. That there are Federal rules to protect them, including a requirement for safety training.
2. How to help keep pesticides from getting on or into their bodies. The poster must include the following instructions:
  - ◆ Avoid getting on your skin or into your body any pesticides that may be on plants and soil, in irrigation water, or drifting from nearby applications.
  - ◆ Wash before eating, drinking, chewing gum, using tobacco, or using the toilet.
  - ◆ Wear work clothing that protects your body from pesticide residues, such as long-sleeved shirts, long pants, shoes, socks, and hats or scarves.
  - ◆ Wash or shower with soap and water, shampoo your hair, and put on clean clothes after work.
  - ◆ Wash work clothes separately from other clothes before wearing them again.
  - ◆ Wash immediately in the nearest clean water if pesticides are spilled or sprayed on your body. As soon as possible, shower, shampoo, and change into clean clothes.
  - ◆ Follow directions about keeping out of treated or restricted areas.



# ◆ Requirements for ◆ Warning Signs

## ◆ 1. Required Words:

- ◆ The words "DANGER—PELIGRO" and "PESTICIDES—PESTICIDAS" must be located at the top of the sign and "KEEP OUT—NO ENTRE" at the bottom.
- ◆ The words must be clearly legible.

## ◆ 2. Required Design:

- ◆ A circle containing an upraised hand on the left and a stern face on the right must be near the center of the sign.
- ◆ The background outside the circle must contrast with the inside of the circle.
- ◆ The hand and a large portion of the face must contrast with the inside of the circle.
- ◆ The remainder of the inside of the circle must be red.
- ◆ The length of the hand must be at least twice the height of the smallest letters.
- ◆ The length of the face must be only slightly smaller than the hand.

## ◆ 3. Additional Information:

◆ You may put additional information on the warning sign, such as the name of the pesticide and the date of application, if it does not detract from the appearance of the sign or change the meaning of the required information.

## ◆ 4. Size:

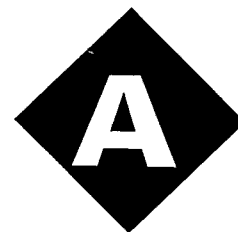
◆ The signs must be at least 14 inches by 16 inches, and the letters must be at least 1 inch high.

### ◆ *Exception:*

◆ You may use smaller signs if the treated area is too small to accommodate 14- by 16-inch signs. For example, when a single potted plant needs to be posted, a smaller sign would be appropriate.



# Criteria for Worker Training



1. WPS training for workers must include at least the following information:
  - ◆ Where and in what form pesticides may be encountered during work activities.
  - ◆ Hazards of pesticides resulting from toxicity and exposure, including acute effects, chronic effects, delayed effects, and sensitization.
  - ◆ Routes through which pesticides can enter the body.
  - ◆ Signs and symptoms of common types of pesticide poisoning.
  - ◆ Emergency first aid for pesticide injuries or poisonings.
  - ◆ How to obtain emergency medical care.
  - ◆ Routine and emergency decontamination procedures, including emergency eyeflushing techniques.
  - ◆ Hazards from chemigation and drift.
  - ◆ Hazards from pesticide residues on clothing.
  - ◆ Warnings about taking pesticides or pesticide containers home.
  - ◆ An explanation of the WPS requirements designed to protect workers, including application and entry restrictions, design of the warning sign, posting of warning signs, oral warnings, availability of specific information about applications, and protection against retaliatory acts.
2. WPS worker training materials must use terms that the worker can understand.



## ✦ Criteria for Handler Training

✦ WPS training for handlers must include at least the following information:

- ✦ ◆ Format and meaning of information on pesticide labels and in labeling, including safety information such as precautionary statements about human health hazards.
- ✦ ◆ Hazards of pesticides resulting from toxicity and exposure, including acute effects, chronic effects, delayed effects, and sensitization.
- ✦ ◆ Routes through which pesticides can enter the body.
- ✦ ◆ Signs and symptoms of common types of pesticide poisoning.
- ✦ ◆ Emergency first aid for pesticide injuries or poisonings.
- ✦ ◆ How to obtain emergency medical care.
- ✦ ◆ Routine and emergency decontamination procedures, including emergency eyeflushing techniques.
- ✦ ◆ Need for and appropriate use of personal protective equipment.
- ✦ ◆ Prevention, recognition, and first aid treatment of heat-related illness.
- ✦ ◆ Safety requirements for handling, transporting, storing, and disposing of pesticides, including general procedures for spill cleanup.
- ✦ ◆ Environmental concerns such as drift, runoff, and wildlife hazards.
- ✦ ◆ Warnings about taking pesticides or pesticide containers home.
- ✦ ◆ An explanation of WPS requirements that handler employers must follow for the protection of handlers and others, including the prohibition against applying pesticides in a manner that will cause contact with workers or other persons, the requirement to use personal protective equipment, the provisions for training and decontamination, and the protection against retaliatory acts.



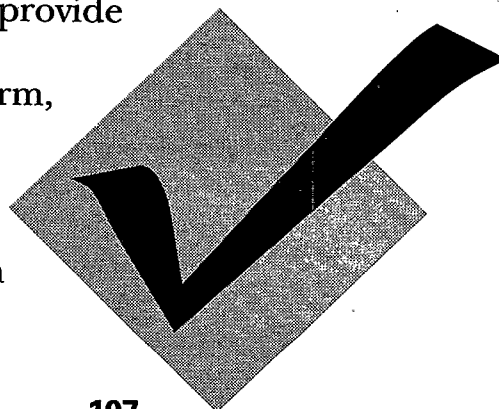
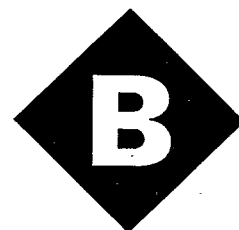
## APPENDIX B

# Sample Forms, Fact Sheets, and Checklists

Appendix B includes a sample Application List form with space for all the pesticide application information the WPS requires to be listed at a central location on each agricultural establishment. The WPS does not specify a format for presenting the information—you may copy this form or design another that meets your needs.

Appendix B also includes several fact sheets to help you comply with sections of the WPS that require you to provide information to others. Although the WPS does not require you to provide this information in written form, you may find that using photocopies of these fact sheets is a convenient way to make sure you convey all the necessary information.

Finally, Appendix B includes some checklists you can use as reminders of your WPS duties.



### **Pesticide Application List ..... 107**

#### **Fact Sheets:**

#### **Information About Cleaning PPE ..... 109–110**

#### **Working Safely With Pesticide Equipment ..... 111**

#### **Custom Applicators Information To Be Provided to Agricultural Establishment Owners and Operators ..... 113**

#### **Agricultural Owners and Operators Information To Be Provided to Employers of Custom Applicators and Independent Crop Advisors ..... 115**

#### **Checklists:**

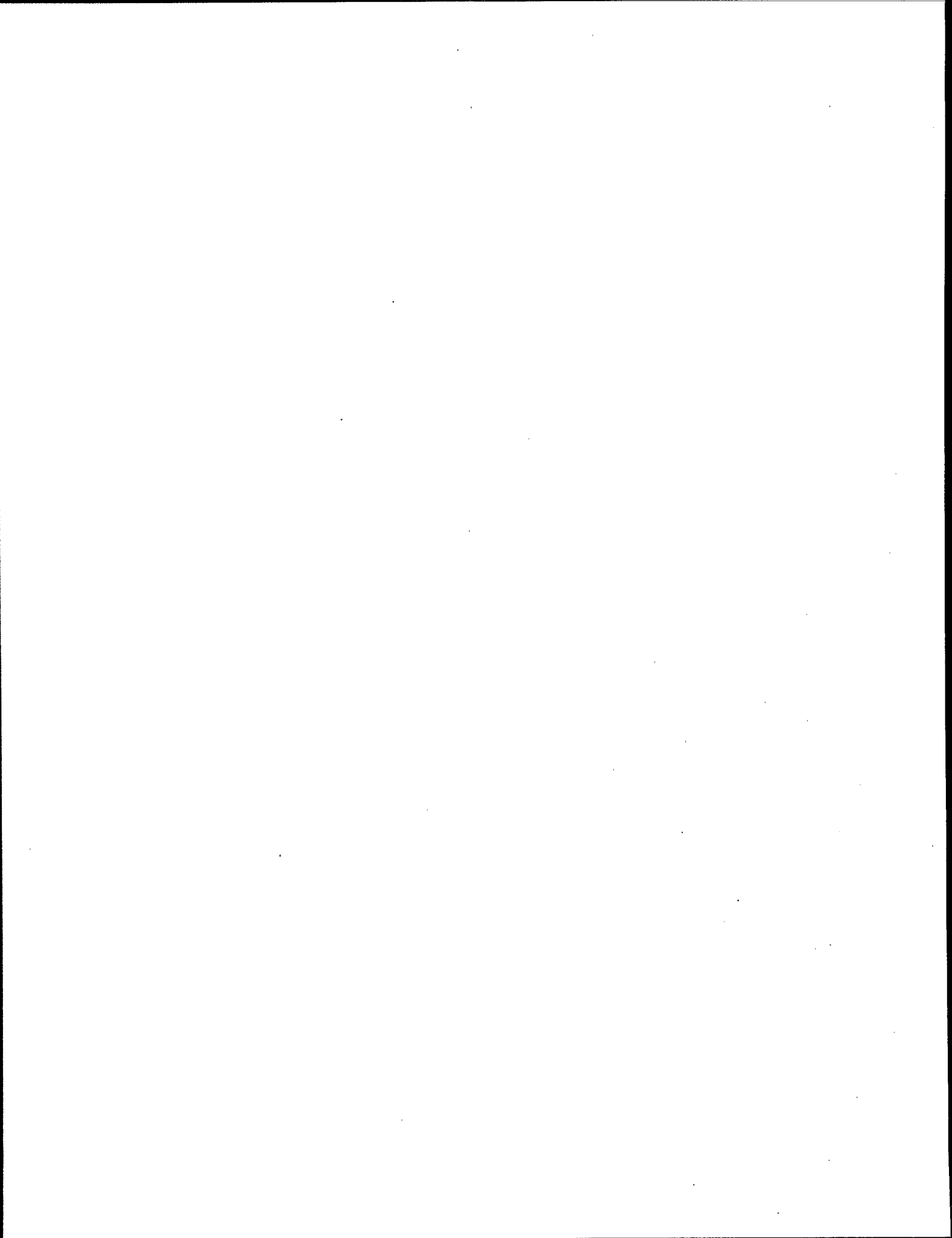
#### **WPS Requirements for Agricultural Workers ..... 117**

#### **WPS Requirements for Pesticide Handlers ..... 119**

#### **WPS Requirements for Commercial Handlers ..... 121**

#### **WPS Exemptions for Agricultural Owners ..... 123**







# Pesticide Application List

**Agricultural Establishment Owners and Operators:** *The use of this form is optional, but if all the information about an application is entered, you will satisfy the 1992 Federal Worker Protection Standard requirement for information that must be displayed at a central place to inform workers and handlers about specific pesticide applications. See pp. 23-24 of the EPA manual "The Worker Protection Standard for Agricultural Pesticides: How To Comply."*

	Application #1	Application #2
Area Treated: Location & Description		
Product Name		
EPA Registration Number		
Active Ingredient: Common or Chemical Name		
Application: Month/Day/Time		
Restricted Entry Interval		
Do Not Enter Until: Month/Day/Time		

*Similar data is required by the Federal Recordkeeping Requirements for Certified Applicators of Federally Restricted Use Pesticides (RUP). For more information on the RUP recordkeeping requirements, contact Agricultural Marketing Service, USDA, 8700 Centerville Rd, Manassas, VA 22110. (703) 330-7826.*







**Note to Employers:** *This 2-page fact sheet will help you comply with the section of the WPS that requires you to provide information to people (other than your own handlers) who clean PPE for you. You are not required to give them this information in written form, but you may find that photocopying this fact sheet is an easy way to be sure you pass along all the necessary information.*

## Information About Cleaning PPE

### Protect Yourself From Pesticides

- ◆ The clothing and protective equipment items you will be cleaning may have pesticides on them.
- ◆ Although you may not be able to see or smell the pesticides, they can rub off on you when you touch the clothing and equipment.
- ◆ If pesticides get on you, they can hurt you. They can:
  - ◆ cause skin rashes or burns,
  - ◆ go through your skin and into your body and make you ill,
  - ◆ burn your eyes,
  - ◆ make you ill if you breathe them or get them in your mouth.
- ◆ To avoid harm from the pesticide, you should:
  - ◆ Pour the clothes from their container into the washer without touching them.
  - ◆ Handle only the inner surfaces, such as the inside of boots, aprons, or coveralls.
  - ◆ Do not breathe the steam from the washer and dryer.
- ◆ Pesticides should not be allowed to stay on your hands:
  - ◆ When you wash clothing or equipment by hand, use plenty of water and rinse your hands often.
  - ◆ Wash your hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
  - ◆ Wash your hands as soon as you finish handling the clothing or equipment.
- ◆ You should not allow clothing and equipment with pesticides on them to be washed with regular laundry. The pesticides can rub off on other items.



## **Recommended Methods for Cleaning PPE**

### **Cleaning Eyewear and Respirators**

Hand-wash reusable respirator facepieces, goggles, face shields, and shielded safety glasses, following manufacturer's instructions. In general, use mild detergent and warm water to wash the items thoroughly. Rinse well. Wipe dry, or hang in a clean area to air dry.

### **Cleaning Other PPE**

- ▶ Follow the manufacturer's cleaning instructions. If the instructions say only to wash the item, or if there are no cleaning instructions, follow the procedure below.

---

### **Recommended procedure for washing most PPE:**

- 1. Rinse** in a washing machine or by hand.
- 2. Wash** in a washing machine, using a heavy-duty detergent and hot water for the wash cycle.
- 3. Wash only a few items at a time** to allow plenty of agitation and water for dilution. Use the highest water-level setting.
- 4. Rinse twice** using two rinse cycles and warm water.
- 5. Use two entire machine cycles** to wash items that are moderately to heavily contaminated.
- 6. Run the washer through at least one more entire cycle** without clothing, using detergent and hot water, to clean the machine.

- 
- ▶ Some plastic or rubber items that are not flat, such as gloves, footwear, and coveralls, must be washed twice—once to clean the outside and a second time after turning the item inside out.
  - ▶ Some items, such as heavy-duty boots and rigid hats or helmets, should be washed by hand using hot water and heavy-duty detergent.
  - ▶ **Hang the items to dry**, if possible. Let them hang for at least 24 hours in an area with plenty of fresh air—preferably outdoors. Do not hang items in enclosed living areas.
  - ▶ You may use a **clothes dryer** for fabric items if it is not possible to hang them to dry. But after repeated use, the dryer may become contaminated with pesticides.

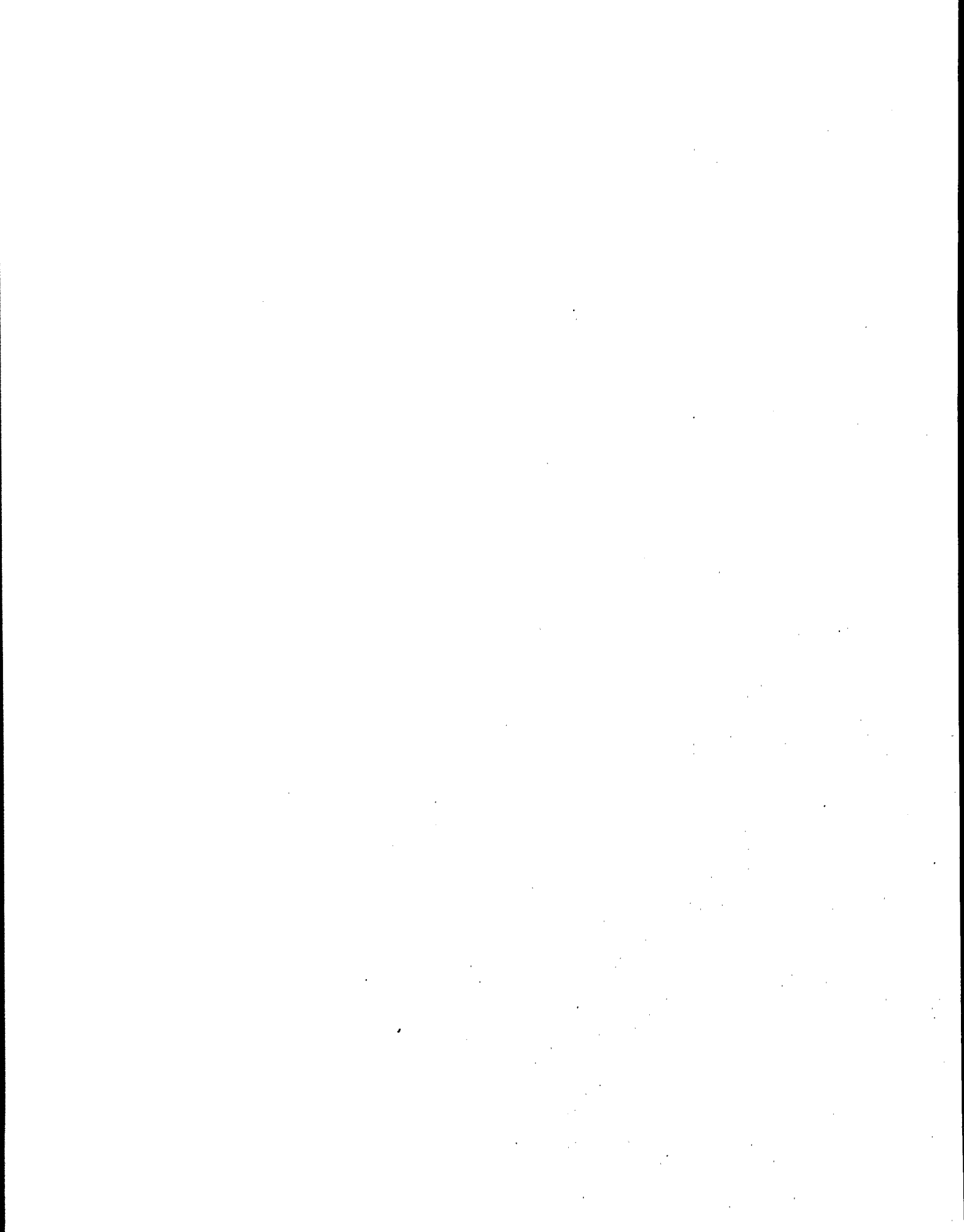


**Note to Employers:** *This fact sheet will help you comply with the section of the WPS that requires you to provide information to people (other than your own handlers) who clean or maintain your pesticide equipment. You are not required to give them this information in written form, but you may find that photocopying this fact sheet is an easy way to be sure you pass along all the necessary information.*

## Working Safely With Pesticide Equipment

- ◆ The equipment you will be cleaning, adjusting, or repairing may have pesticides on it. Although you may not be able to see or smell the pesticides, they can rub off on you when you touch the equipment.
- ◆ If pesticides get on you, they can hurt you. They can:
  - ◆ cause skin rashes or burns,
  - ◆ go through your skin and into your body and make you ill,
  - ◆ burn your eyes,
  - ◆ make you ill if you get them in your mouth.
- ◆ You should wear work clothing that protects your body from pesticide residues, such as long-sleeved shirts, long pants, shoes, and socks. If possible, avoid touching the parts of the equipment where the pesticide is most likely to be. Or, if practical for the job that you will be doing, consider wearing rubber or plastic gloves and an apron.
- ◆ You should not let pesticides stay on your hands:
  - ◆ Wash your hands as soon as you finish handling the equipment.
  - ◆ Wash your hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
  - ◆ Wash or shower with soap and water, shampoo your hair, and put on clean clothes after work.
  - ◆ Wash work clothes that may have pesticides on them separately from other clothes before wearing them again.







# Agricultural Establishment Owners & Operators

**Agricultural Establishment Owners and Operators:** *The use of this form is optional, but, if you hire custom applicators or independent crop advisors, you must provide this information to the employers of those persons. This information is necessary to assure that custom applicators and independent crop advisors are protected according to the 1992 Federal Worker Protection Standard. See pp. 33-34 of the EPA manual "The Worker Protection Standard for Agricultural Pesticides: How To Comply."*

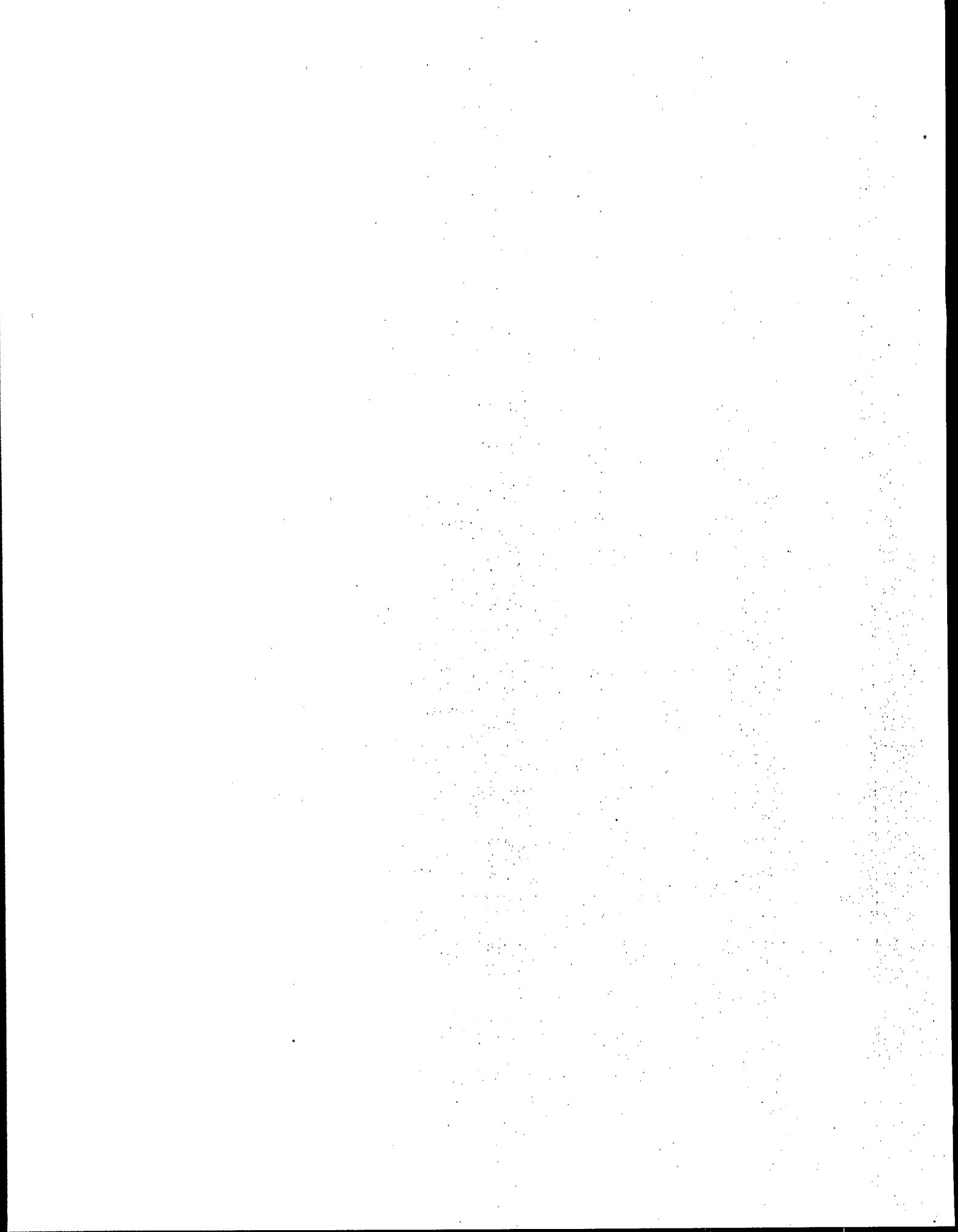
## Information To Be Provided to Employers of Custom Applicators and Independent Crop Advisors

*The following information refers to areas that your employees may need to enter, or come within 1/4 mile of on foot, while working on this agricultural establishment.*

	Application #1	Application #2
Areas to be Treated or Under Restricted Entry Intervals: Location & Description		
Entry Restricted Until: Month/Day/ Time		
PPE Required for Handlers*		
Early Entry PPE Required for Workers*		

\* *The only early entry allowed is that which is permitted by the 1992 Federal Worker Protection Standard.*







# Custom Applicators

**Custom (for Hire) Applicators:** *The use of this form is optional, but you must provide this information to the agricultural owners and operators who hire you to apply pesticides. This information is necessary to assure that the grower's employees are protected according to the 1992 Federal Worker Protection Standard. See p. 33 of the EPA manual "The Worker Protection Standard for Agricultural Pesticides: How To Comply."*

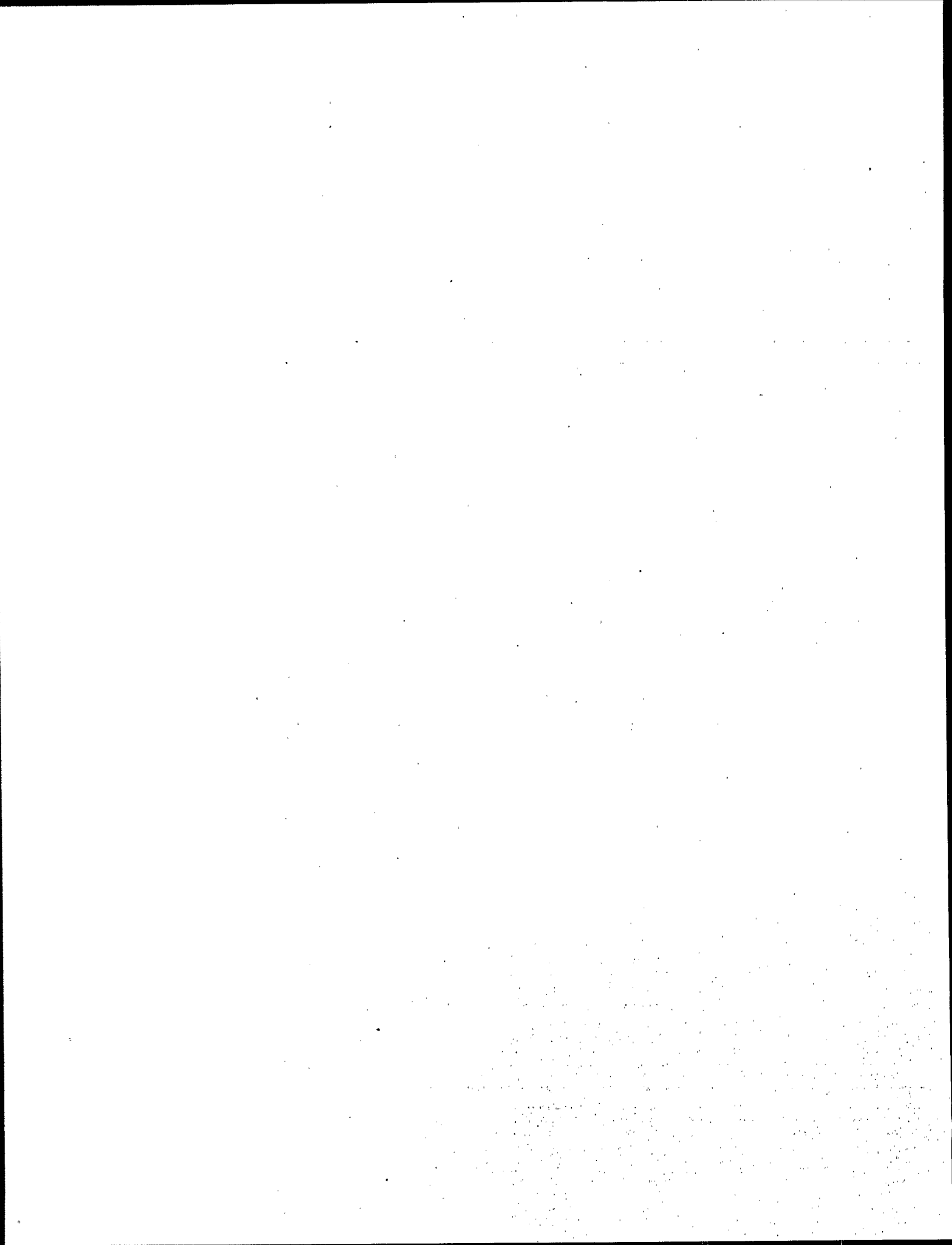
## Information to be Provided to Agricultural Establishment Owners and Operators

	Application #1	Application #2
Area to be Treated: Location & Description		
Product Name		
EPA Registration Number		
Active Ingredient: Common or Chemical Name		
Application: Month/Day/Time*		
Entry Restricted Until: Month/Day/Time		
Are Both Treated Area Posting and Oral Notification Required?		
PPE Required for Handlers**		
Early Entry PPE Required for Workers**		
Other Label Requirements to Protect Workers & Others		

\* *If the pesticide is not applied as scheduled, the customer must be notified of the corrected time and date before the application, or as soon as possible after the application.*

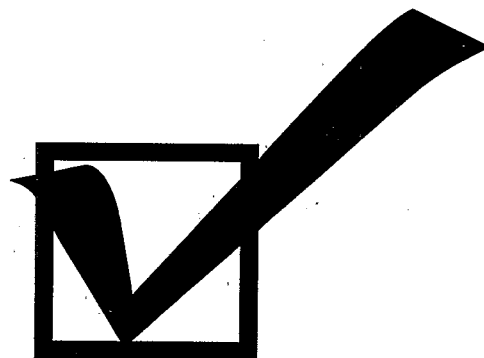
\*\* *The only early entry allowed is that permitted by the 1992 Federal Worker Protection Standard.*







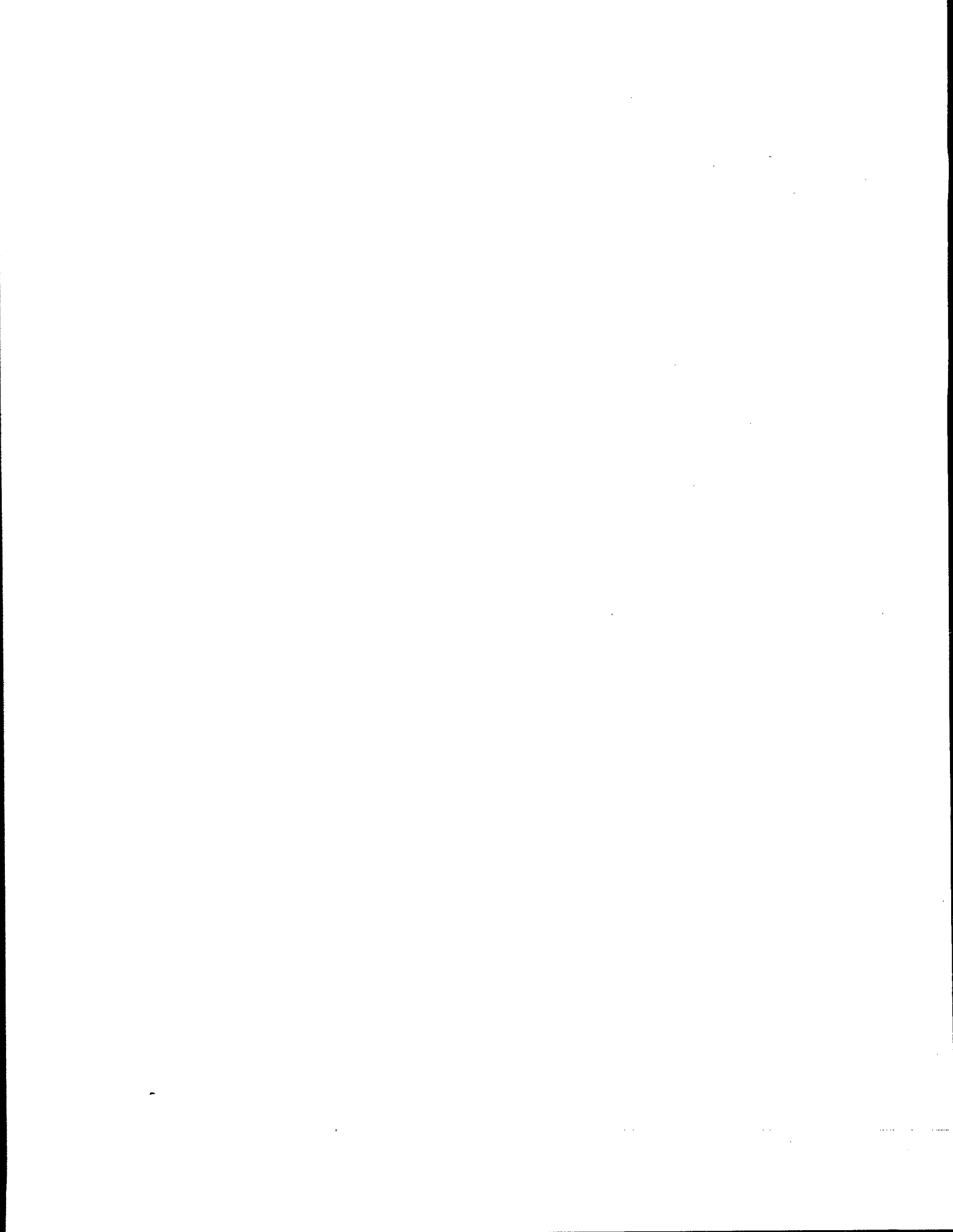
# Checklist: WPS Requirements for Agricultural Workers



Have you given your agricultural workers all the protections required by the EPA Worker Protection Standard? Use this list as a reminder. Remember that you have duties to persons other than your worker employees. For complete explanations, refer to "The Worker Protection Standard for Agricultural Pesticides—How To Comply."

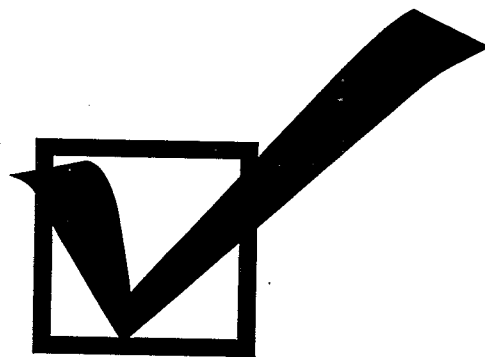
- ☒ Information at a central location (WPS safety poster, application list, location of emergency medical facility) .....pp. 23–24
- ☒ Pesticide safety training for workers .....pp. 25–28
- ☒ Decontamination sites (water, soap, towels, etc.) .....pp. 29–31
- ☒ Emergency assistance (transportation and information) .....pp. 35–36
- ☒ Restrictions during applications (do not allow workers in area) .....p. 45
- ☒ Special application restrictions in nurseries .....pp. 51–52
- ☒ Special application restrictions in greenhouses .....pp. 53–55
- ☒ Restrictions during restricted-entry intervals (and limitations on early entry) .....pp. 45–47, 59–70
- ☒ Notice about applications (oral warnings and treated area posting) .....pp. 41–44







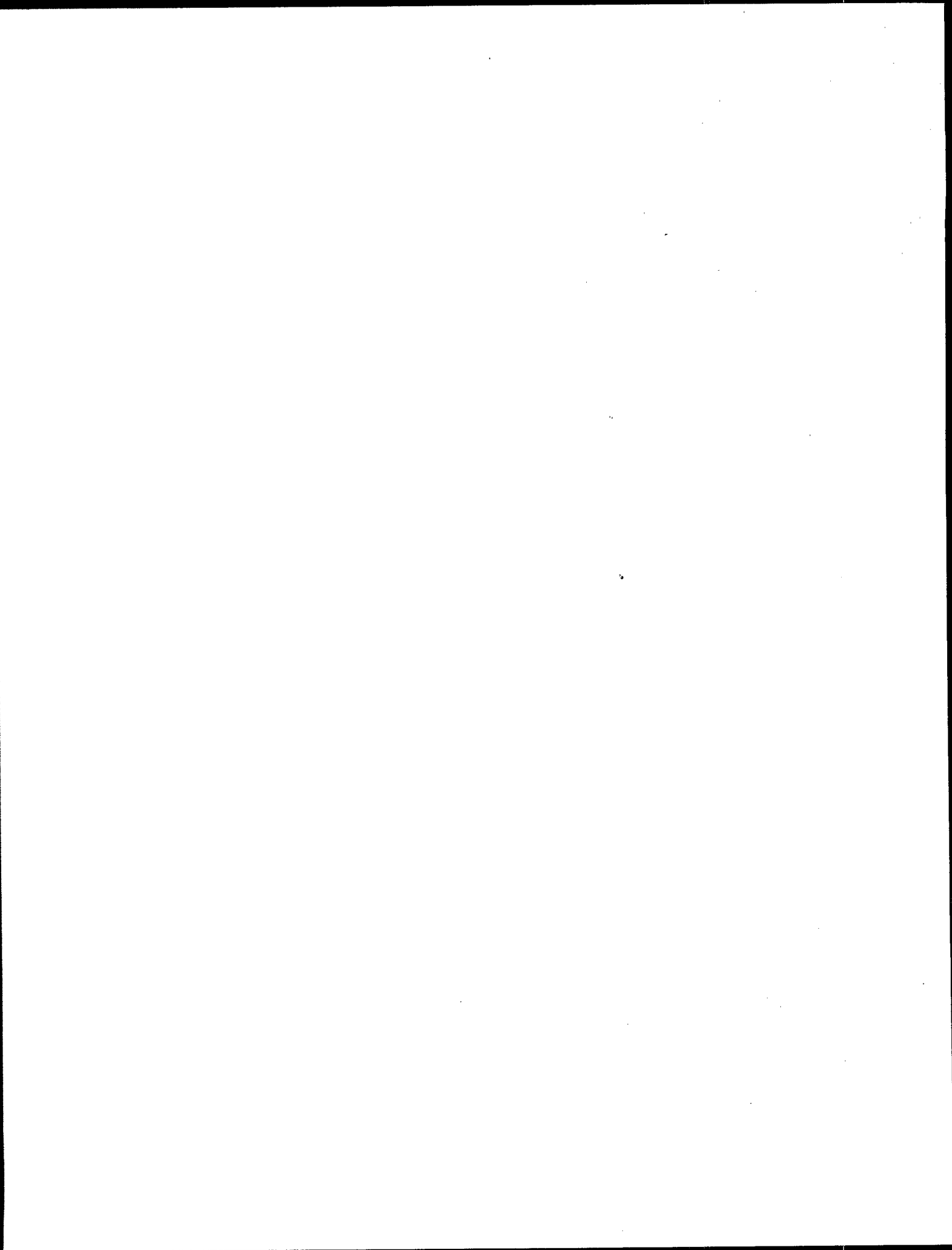
# Checklist: WPS Requirements for Pesticide Handlers



Have you given your pesticide handlers all the protections required by the EPA Worker Protection Standard? Use this list as a reminder. Remember that you have duties to persons other than your handler employees. For complete explanations, refer to "The Worker Protection Standard for Agricultural Pesticides—How To Comply."

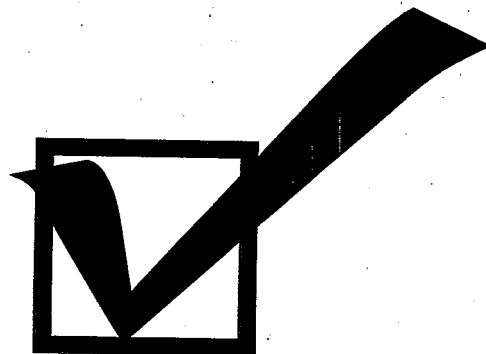
- ☒ Information at a central location (WPS safety poster, application list, location of emergency medical facility) .....pp. 23–24
- ☒ Pesticide safety training for handlers .....pp. 25–28
- ☒ Decontamination site (water, soap, towels, change of clothing, etc.) .....pp. 29–31
- ☒ Emergency assistance (transportation and information) .....pp. 35–36
- ☒ Restrictions during applications (do not allow pesticide to contact anyone directly or through drift) .....p. 73
- ☒ Monitoring handlers (if handling skull and crossbones pesticides anywhere or fumigants in greenhouses) .....pp. 73–74
- ☒ Specific instructions for handlers (pesticide label information and how to use application equipment) .....pp. 75–76
- ☒ Equipment safety (inspection and maintenance of application equipment) .....p. 77
- ☒ Personal protective equipment (provide, clean, maintain PPE, and prevent heat illness) .....pp. 79–83
- ☒ Exceptions to personal protective equipment (closed systems, enclosed cabs, and open and enclosed cockpits) .....pp. 85–87







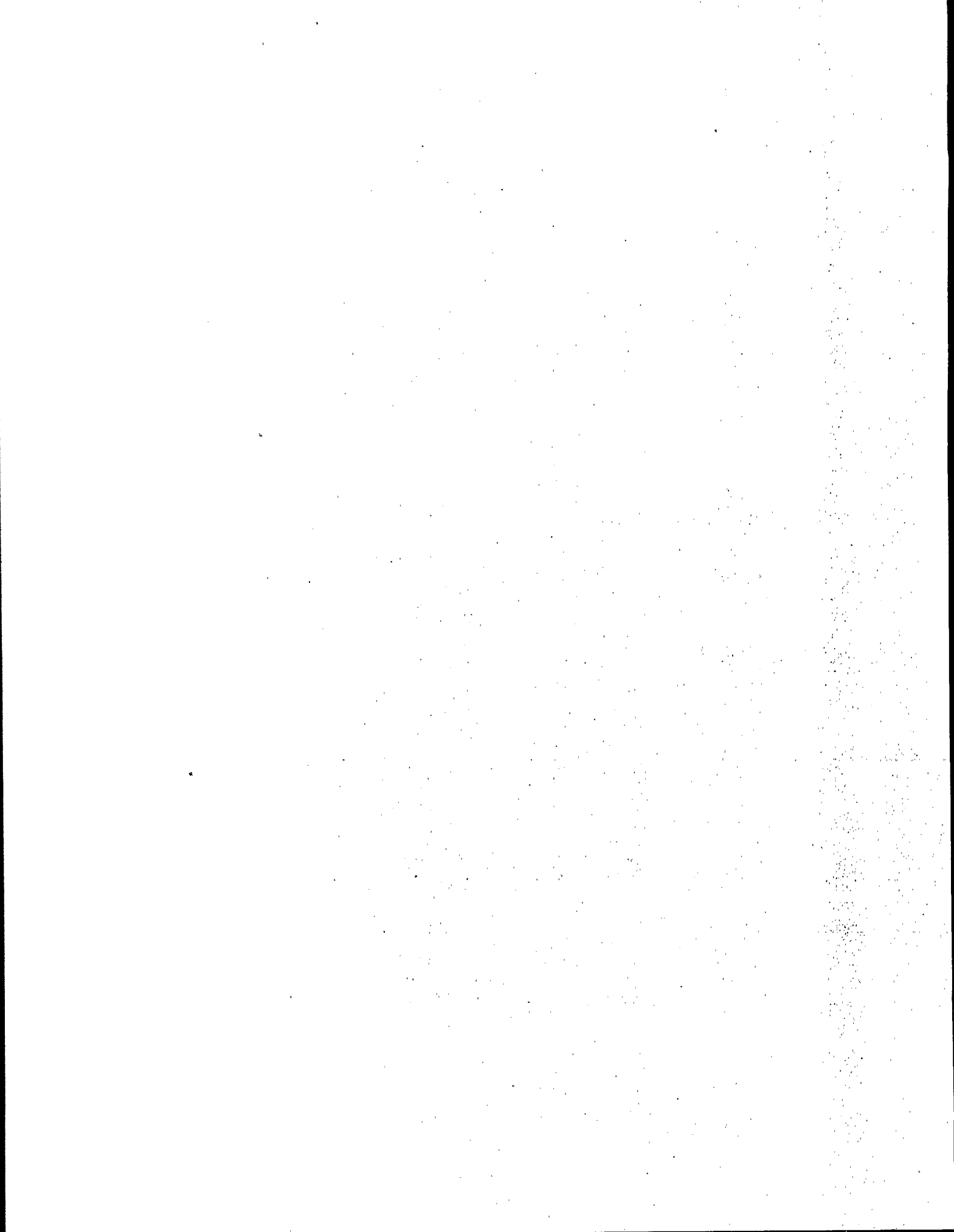
# Checklist: WPS Requirements for Commercial Handlers



Have you given the handler employees of your commercial pesticide handling establishment all the protections required by the EPA Worker Protection Standard? Use this list as a reminder. Remember that you have duties to persons other than your handler employees. For complete explanations, refer to "The Worker Protection Standard for Agricultural Pesticides—How To Comply."

- ☒ Pesticide safety training for handlers .....pp. 25-28
- ☒ Decontamination site (water, soap, towels, change of clothing, etc.) .....pp. 29-31
- ☒ Emergency assistance (transportation and information) .....pp. 35-36
- ☒ Restrictions during applications (do not allow pesticide to contact anyone directly or through drift) .....p. 73
- ☒ Monitoring handlers (if handling skull and crossbones pesticides anywhere or fumigants in greenhouses) .....pp. 73-74
- ☒ Specific instructions for handlers (pesticide label information and how to use application equipment) .....pp. 75-76
- ☒ Equipment safety (inspection and maintenance of application equipment) .....p. 77
- ☒ Personal protective equipment (provide, clean, maintain PPE, and prevent heat illness) .....pp. 79-83
- ☒ Exceptions to personal protective equipment (closed systems, enclosed cabs, and open and enclosed cockpits) .....pp. 85-87

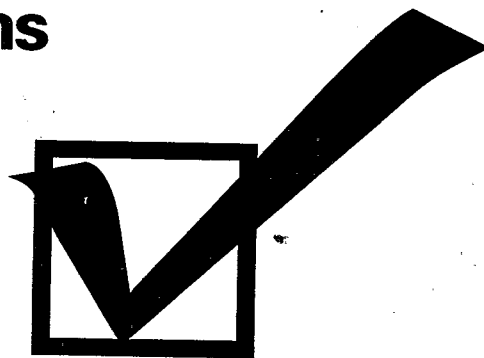






# Checklist: WPS Exemptions for Agricultural Owners

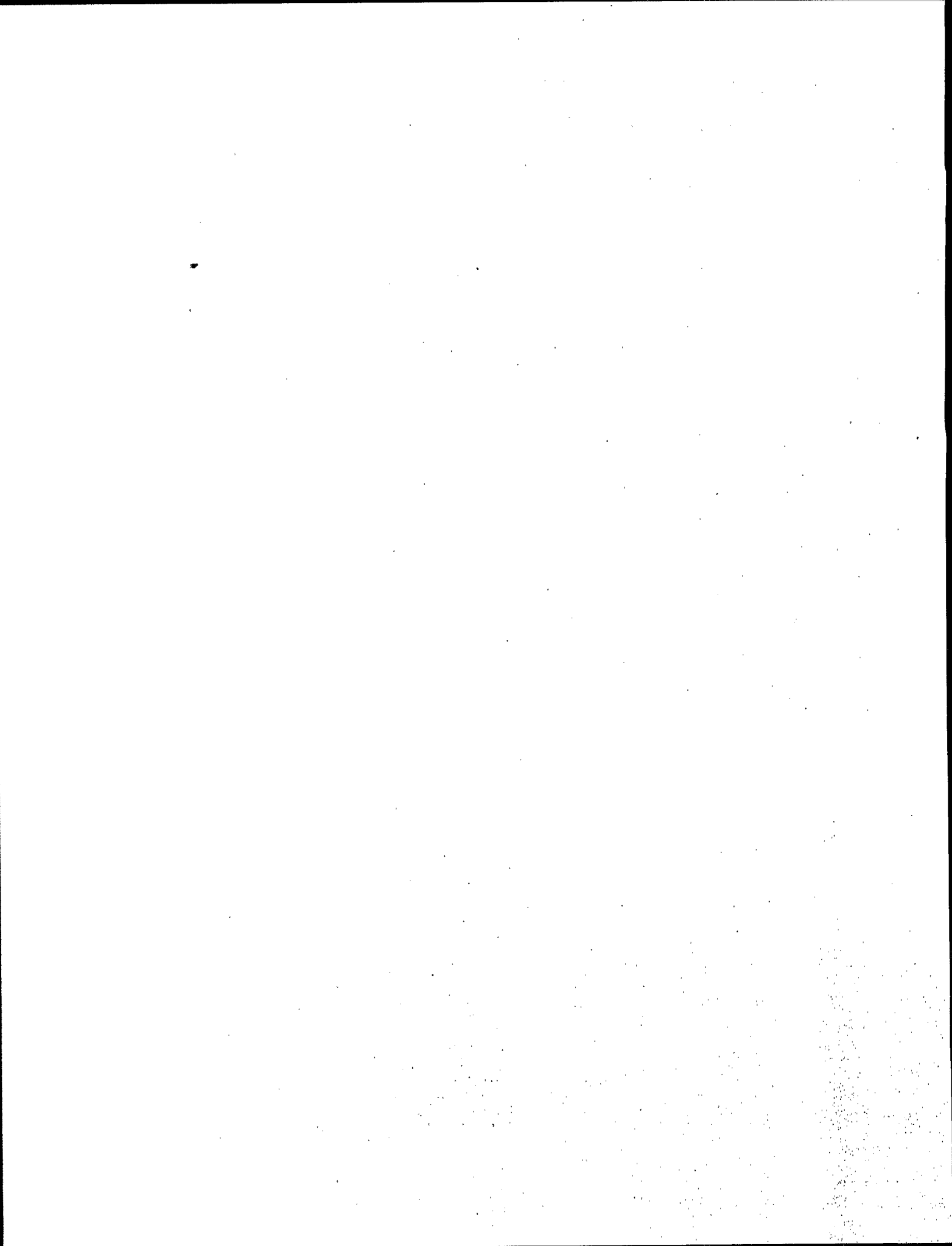
Although agricultural owners are encouraged to give all WPS protections to themselves and their families,\* the WPS does not REQUIRE them to provide themselves or members of their immediate family with the following:



- ☒ Information at a central location (WPS safety poster, application list, and location of emergency medical facility) ..... pp. 23-24
- ☒ Pesticide safety training for workers or handlers ..... pp. 25-28
- ☒ Decontamination sites (water, soap, towels, change of clothing, etc.) ..... pp. 29-31
- ☒ Emergency assistance (transportation and information) ..... pp. 35-36
- ☒ Notice about applications (oral warnings and treated area posting) ..... pp. 41-44
- ☒ Monitoring handlers (if handling skull and crossbones pesticides anywhere or fumigants in greenhouses) ..... pp. 73-74
- ☒ Specific handling instructions (pesticide label information and how to use application equipment) ..... pp. 75-76
- ☒ Equipment safety (inspection and maintenance of application equipment) ..... p. 77
- ☒ All the specific duties related to the care of PPE and management of its use (provide, clean, maintain PPE and prevent heat illness) ..... pp. 79-81
- ☒ The following duties related to early entry: ..... pp. 65-70
  - ◆ Training and instructions
  - ◆ Decontamination sites
  - ◆ Specific duties related to the care of PPE and management of its use.

\* Remember that you must provide all protections required by the WPS to persons who are NOT members of your immediate family.



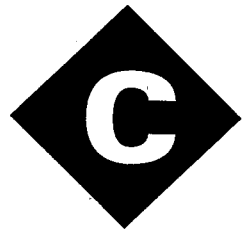




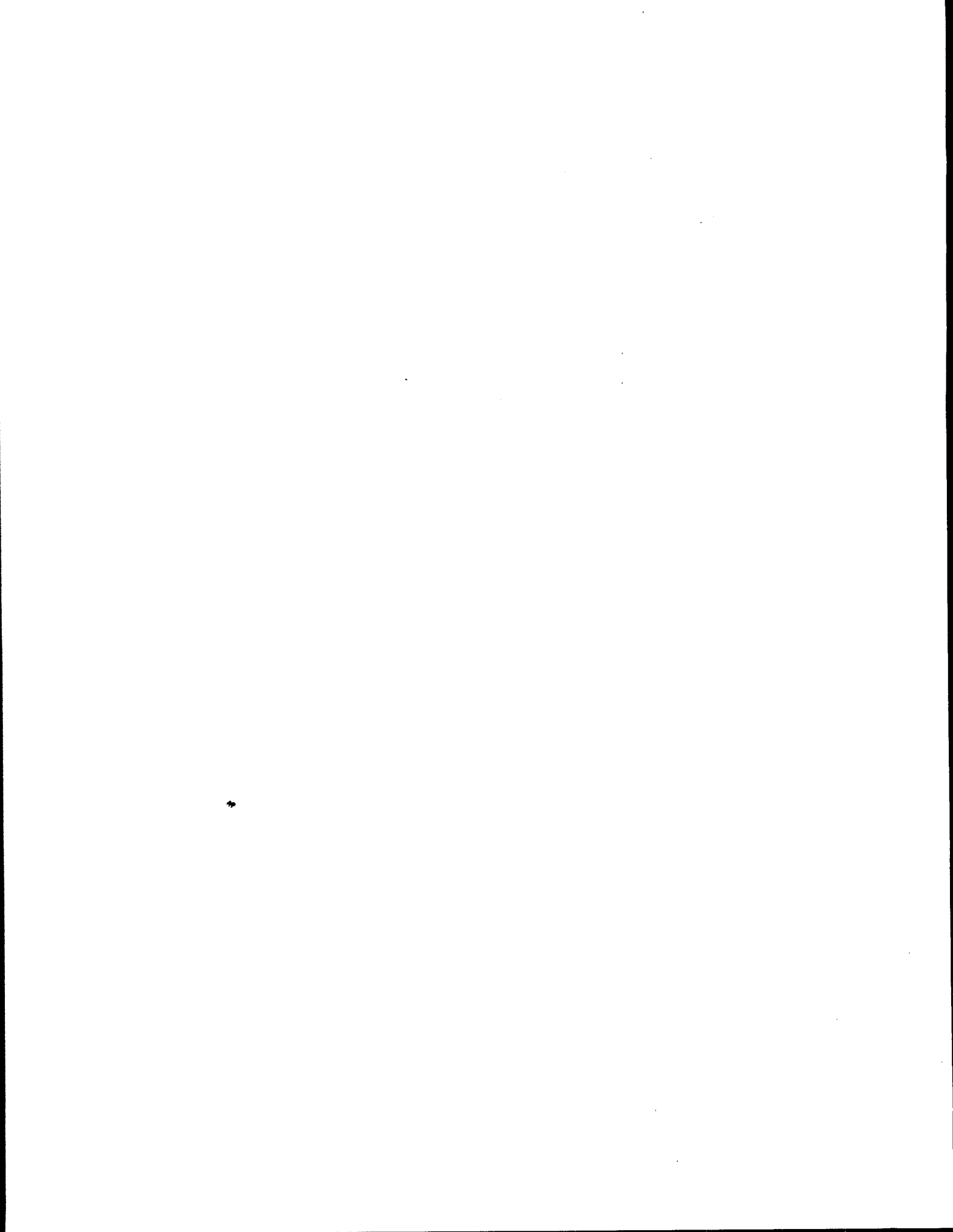
## APPENDIX C

# Quick Reference Guide to the 1992 Worker Protection Standard

(Large-Print Version)









The WPS is a Federal regulation designed to protect **agricultural workers** (people involved in the production of agricultural plants) and **pesticide handlers** (people mixing, loading, or applying pesticides or doing other tasks involving direct contact with pesticides) (see pp. 14–15). This guide presents the **maximum** WPS requirements. It does not include exceptions that may permit you to do less or options that may involve different requirements. **You will be in compliance with the Federal WPS if you make sure that the requirements listed here are met.** Each section lists pages in this manual where you can find out about exceptions and options. For more information about your responsibilities, read pp. 12–20. There are some exemptions for owners of agricultural establishments and members of their immediate family (see pp. 91–93).

# ♦ QUICK ♦ REFERENCE ♦ GUIDE TO ♦ THE 1992 ♦ WORKER ♦ PROTECTION ♦ STANDARD ♦ (WPS)

♦ July 1993

## Topics

### Duties for All Employers

- Anti-Retaliation
- Information at a Central Location
- Pesticide Safety Training
- Decontamination Sites
- Employer Information Exchange
- Emergency Assistance

### Additional Duties for Worker Employers

- Restrictions During Applications
- Restricted-Entry Intervals (REI's)
- Notice About Applications
  - Posted Warning Signs
  - Oral Warnings

### Additional Duties for Handler Employers

- Application Restrictions and Monitoring
- Specific Instructions for Handlers
- Equipment Safety
- Personal Protective Equipment (PPE)
  - Duties Related to PPE
  - Care of PPE
  - Replacing Respirator Purifying Elements
  - Disposal of PPE
  - Instructions for People Who Clean PPE



# DUTIES FOR ALL EMPLOYERS

## ♦ Anti-Retaliation (p. 19)

- ♦ Do not retaliate against a worker
- ♦ or handler who attempts to
- ♦ comply with the WPS.

## ♦ Information at a Central Location (pp. 23-24)

- ♦ 1. In an easily seen central
- ♦ location on each agricultural
- ♦ establishment, display close
- ♦ together:
  - ♦ ♦ EPA WPS safety poster,
  - ♦ ♦ name, address, and tele-
  - ♦ ♦ phone number of the
  - ♦ ♦ nearest emergency medical
  - ♦ ♦ facility,
  - ♦ ♦ these facts about each
  - ♦ ♦ pesticide application [from
  - ♦ ♦ before each application
  - ♦ ♦ begins until 30 days after
  - ♦ ♦ the restricted-entry interval
  - ♦ ♦ (REI)]:
    - ♦ ♦ ♦ product name, EPA
    - ♦ ♦ ♦ registration number,
    - ♦ ♦ ♦ and active
    - ♦ ♦ ♦ ingredient(s),
    - ♦ ♦ ♦ location and descrip-
    - ♦ ♦ ♦ tion of treated area,
    - ♦ ♦ ♦ time and date of
    - ♦ ♦ ♦ application, and REI.
- ♦ 2. Tell workers and handlers
- ♦ where the information is
- ♦ posted, and allow them access.
- ♦ 3. Tell them if emergency
- ♦ facility information changes
- ♦ and update the posted
- ♦ information.
- ♦ 4. Keep the posted information
- ♦ legible.

## ♦ Pesticide Safety Training (pp. 25-28)

- ♦ Unless they possess a valid EPA-
- ♦ approved training card, train
- ♦ **handlers and workers** before they
- ♦ begin work and at least once
- ♦ each 5 years:

- ♦ use written and/or audiovi-
- ♦ sual materials,
- ♦ use EPA WPS handler
- ♦ training materials for
- ♦ training handlers,
- ♦ use EPA WPS worker
- ♦ training materials for
- ♦ training workers,
- ♦ have a certified applicator
- ♦ conduct the training orally
- ♦ and/or audiovisually in a
- ♦ manner the employees can
- ♦ understand, using easily
- ♦ understood terms, and
- ♦ respond to questions.

## Decontamination Sites (pp. 29-31)

1. Establish a decontamination site within 1/4 mile of all workers and handlers. Supply:
  - ♦ enough water for routine and emergency whole-body washing and for eye-flushing,
  - ♦ plenty of soap and single-use towels,
  - ♦ a clean coverall.
2. Provide water that is safe and cool enough for washing, for eyeflushing, and for drinking. Do not use tank-stored water that is also used for mixing pesticides.
3. Provide **handlers** the same supplies where personal protective equipment (PPE) is removed at the end of a task.
4. Provide the same supplies at each mixing and loading site.
5. Make at least 1 pint eyeflush water immediately accessible to each **handler**.
6. Do not put **worker** decontamination sites in areas being treated or under an REI.



7. In areas being treated, put decontamination supplies for **handlers** in enclosed containers.

### **Employer Information Exchange (pp. 33-34)**

1. Before any application, commercial handler employers must make sure the operator of the agricultural establishment where a pesticide will be applied is aware of:
  - ◆ location and description of area to be treated,
  - ◆ time and date of application,
  - ◆ product name, EPA registration number, active ingredient(s), and REI,
  - ◆ whether the product label requires both oral warnings and treated area posting,
  - ◆ all other safety requirements on labeling for workers or other people.
2. Operators of agricultural establishments must make sure any commercial pesticide establishment operator they hire is aware of:
  - ◆ specific location and description of all areas on the agricultural establishment where pesticides will be applied or where an REI will be in effect while the commercial handler is on the establishment,
  - ◆ restrictions on entering those areas.

### **Emergency Assistance (pp. 35-36)**

When any handler or worker may have been poisoned or injured by pesticides:

1. Promptly make transportation available to an appropriate medical facility.
2. Promptly provide to the victim and to medical personnel:
  - ◆ product name, EPA registration number, and active ingredient(s),
  - ◆ all first aid and medical information from label,
  - ◆ description of how the pesticide was used,
  - ◆ information about victim's exposure.

◆◆◆

## **DUTIES FOR ALL EMPLOYERS**



- ◆ **Restrictions During**
- ◆ **Applications (p. 45)**

- ◆ (Also see nursery restrictions and greenhouse restrictions.) (pp. 51–52, 53–55)

- ◆ During any REI, do not allow
- ◆ **workers** to enter a treated area
- ◆ and contact anything treated
- ◆ with the pesticide to which the
- ◆ REI applies.

- ◆ (Also see early entry by workers.)
- ◆ (pp. 46–47, 59–70)

1. Orally warn workers **and** post treated areas if the pesticide labeling requires.
2. Otherwise, **either** orally warn workers or post entrances to treated areas. Tell workers which method is in effect.
3. Post all greenhouse applications.

1. Post legible 14" X 16" WPS-design signs just before application; keep posted during REI; remove before workers enter and within 3 days after the end of the REI.
2. Post signs so they can be seen at all entrances to treated areas, including entrances from labor camps.

1. Before each application, tell workers who are on the establishment (in a manner they can understand):
  - ◆ location and description of treated area,
  - ◆ REI, and not to enter during REI.
2. Workers who enter the establishment after application starts must receive the same warning at the start of their work period.

◆◆◆



## **Application Restrictions and Monitoring (pp. 73-74)**

1. Do not allow handlers to apply a pesticide so that it contacts, directly or through drift, anyone other than trained and PPE-equipped handlers.
2. Make sight or voice contact at least every 2 hours with anyone handling pesticides labeled with a skull and crossbones.
3. Make sure a trained handler equipped with labeling-specified PPE maintains constant voice or visual contact with any handler in a greenhouse who is doing fumigant-related tasks, such as application or air-level monitoring.

## **Specific Instructions for Handlers (pp. 75-76)**

1. Before handlers do any handling task, inform them, in a manner they can understand, of all pesticide labeling instructions for safe use.
2. Keep pesticide labeling accessible to each handler during entire handling task.
3. Before handlers use any assigned handling equipment, tell them how to use it safely.
4. When commercial handlers will be on an agricultural establishment, inform them beforehand of:
  - ◆ areas on the establishment where pesticides will be applied or where an REI will be in effect,
  - ◆ restrictions on entering those areas.

(The agricultural establishment operator must give you these facts.)

## **Equipment Safety (p. 77)**

1. Inspect pesticide handling equipment before each use, and repair or replace as needed.
2. Allow only appropriately trained and equipped handlers to repair, clean, or adjust pesticide equipment that contains pesticides or residues.

## **Personal Protective Equipment (PPE) (pp. 79-83)**

(See exceptions to PPE, pp. 85-87)

### **Duties Related to PPE:**

1. Provide handlers with the PPE the pesticide labeling requires for the task, and be sure it is:
  - ◆ clean and in operating condition,
  - ◆ worn and used correctly,
  - ◆ inspected before each day of use,
  - ◆ repaired or replaced as needed.
2. Be sure respirators fit correctly.
3. Take steps to avoid heat illness.
4. Provide handlers a pesticide-free area for:
  - ◆ storing personal clothing not in use,
  - ◆ putting on PPE at start of task,
  - ◆ taking off PPE at end of task.
5. Do not allow used PPE to be worn home or taken home.

# **ADDITIONAL DUTIES FOR HANDLER EMPLOYERS**



# ADDITIONAL DUTIES FOR HANDLER EMPLOYERS

## ♦ Care of PPE:

- ♦ 1. Store and wash used PPE separately from other clothing and laundry.
- ♦ 2. If PPE will be reused, clean it before each day of reuse, according to the instructions from the PPE manufacturer unless the pesticide labeling specifies other requirements. If there are no other instructions, wash in detergent and hot water.
- ♦ 3. Dry the clean PPE before storing, or hang to dry.
- ♦ 4. Store clean PPE away from other clothing and away from pesticide areas.

## ♦ Replacing Respirator Purifying Elements:

- ♦ 1. Replace dust/mist filters:
  - ♦ when breathing becomes difficult,
  - ♦ when filter is damaged or torn,
  - ♦ when respirator label or pesticide label requires (whichever is shorter), **OR**
  - ♦ at the end of day's work period, in the absence of any other instructions or indications.
- ♦ 2. Replace vapor-removing cartridges/canisters:
  - ♦ when odor/taste/irritation is noticed,
  - ♦ when respirator label or pesticide label requires (whichever is shorter), **OR**
  - ♦ at the end of day's work period, in the absence of any other instructions or indications.

## Disposal of PPE:

- 1. Discard coveralls and other absorbent materials that are heavily contaminated with undiluted pesticide having a DANGER or WARNING signal word.
- 2. Follow Federal, State, and local laws when disposing of PPE that cannot be cleaned correctly.

## Instructions for People Who Clean PPE:

Inform people who clean or launder PPE:

- ♦ that PPE may be contaminated with pesticides,
- ♦ of the potentially harmful effects of exposure to pesticides,
- ♦ how to protect themselves when handling PPE,
- ♦ how to clean PPE correctly.

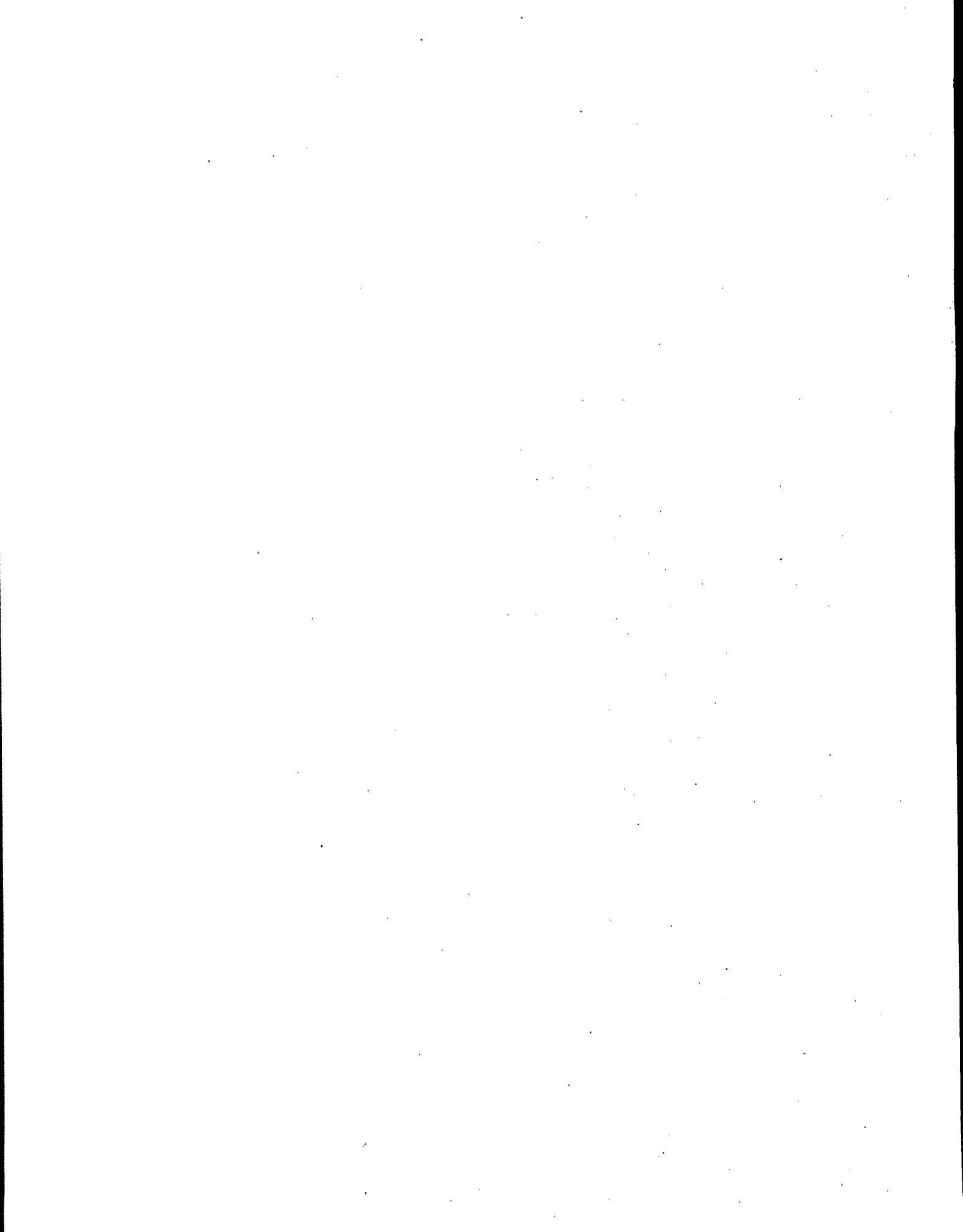
♦♦♦



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\* Page numbers in boldface type denote definitions.



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